PRACTICAL PHYSIOLOGY.

Lectures ON EXPERIMENTAL PHYSIOLOGY.

By WM. RUTHERFORD, M.D., F.R.S.E.,
PROFESSOR OF PHYSIOLOGY IN KING'S COLLEGE.

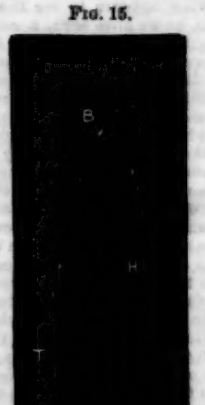
LECTURE V.

INNERVATION (CONTINUED).—CONDUCTION OF NERVE ENERGY (CONTINUED).—NATURE OF NERVE ENERGY.—ELECTRO-MOTIVE POWER OF NERVES.—GENERAL FUNCTIONS OF NERVE-CELLS.—FUNCTIONS OF NERVES.—EXPERIMENTAL METHODS FOR INVESTIGATING THE FUNCTIONS OF THE NERVOUS SYSTEM.

GENTLEMEN,—At our last meeting we busied ourselves with the mensuration of the velocity of nerve energy. I showed you the mode in which this velocity is ascertained in the nerves of the frog, and stated to you the effect of various agents upon it in the nerves of this animal. Ere I pass to the main subject of to-day's demonstration, I shall show you how to measure the velocity in human sensory nerves, selecting for this purpose those of the thigh. We shall estimate the time taken by the nerve energy to pass from the foot to the upper part of the thigh.

[To prevent tediousness, the following account is substituted for this portion of the lecture. Several instruments have been used for the performance of this experiment. Marey's myograph (see Lecture IV.) may be employed. That invented by Helmholtz (see Lecture IV.) is the one which I use. Two pairs of wires, connected with a powerful induction machine, are placed against the skin of the leg; one pair at the foot, the other pair at the upper part of the thigh. At one time the foot, at another time the thigh, is irritated. The individual operated upon takes hold of the movable rod connected with the pin that writes upon the revolving cylinder (see Fig. 9, Lecture IV.), and the moment he feels the irritation he moves the pin, and so makes a mark upon the cylinder. The following figure will indicate the manner in which this experiment is performed:—

FIG. 15.



B, Position of hand. F, Position of foot. T, That of the thigh. The vertical lines indicate nerves connecting the foot and hand with the brain (B). The arrows indicate the direction taken by the nerve influence from the foot or thigh to the brain, and from thence to the muscles of the hand.

The lower nerve-cell in the diagram indicates a cell in the sensory ganglia; the other indicates a cell from which emanates the voluntary motor influence that moves the muscles of the arm and hand. One pair of electrical wires is placed at F, and another pair at T; and the object of the experiment is to ascertain the time taken by the nerve influence to pass from F to T. The cylinder of the machine is thrown into revolution (see Lecture IV.) When it attains a given speed it causes a powerful inductive shock to irritate the foot. The moment the individual feels this he makes a mark upon the cylinder. A known point on the cylinder's surface corresponds to the moment when the irritating shock of electricity is produced. The amount of a horizontal line on the cylinder's surface which intervenes between this point and the mark made by the hand of the individual indicates the time taken by the nerve influence to pass from F to H. That space of time is noted. The experiment is repeated, but this time the thigh, instead of the foot, is stimulated. The time taken by the nerve influence to pass from T to H being thus ascertained, the difference between the two periods indicates the time taken by the nerve influence to pass from F to T. The length of the portion of the leg between the irritated points F and T is then ascertained. This *approximatively* indicates the length of the sciatic, popliteal, and tibial nerves.]

In our experiment we have found that the rate of transmission in the sensory nerves of the leg is 140 feet per second. Were we to continue the experiment, however, we should probably find that the result varies a good deal even in the same individual. In different persons the result varies still more. Different observers have given results of experiments of this sort which are very discrepant. According to Kohlrausch, the rate is 308·9, Helmholtz gives it at 196·8, Von Wittich at 135·4, and Schelske puts it down at 98·4, feet per second. I have not performed many experiments having reference to this point; but results of those which I have made agree more closely with Von Wittich's than with those of other observers. I will not venture to offer an explanation of these discrepancies; Helmholtz is engaged in an investigation of the point, and we may, of course, expect an important advance in our knowledge of the matter. We may safely say, however, that a very important cause of the variation in the results of such experiments is the variable time taken by the mental processes concerned in issuing the command to the motor nerves of the arm, after having perceived the sensation due to stimulating the nerves of the leg. Scarcely any of us can have failed to observe not only that different persons require very different periods of time to perform even the simplest mental processes, but that we ourselves vary very much from time to time in this respect.

At our last demonstration we saw that in human motor nerves the influence travels at the rate of 111 feet per second, and to-day we have seen that in sensory nerves the rate is 140 feet per second. Possibly some of you have already been struck by the thought that this rate is not anything extraordinary. You could whirl a stone through the air as fast as that. Electricity travels along a wire at the rate of 87,500 *miles* per second. You could send an electrical message to America in as short a time as you take to send a nerve message from your brain to your foot. Again, light travels at the speed of 195,000 miles per second. Compared with these swift messengers, nerve energy is as a snail compared to a racehorse.

Pflüger discovered a curious fact regarding the stimulation of a motor nerve, and the effect which it produces on a muscle. He found that when he stimulated with equal force the sciatic nerve of a frog at one time near the gastrocnemius and at another time at a distance from the muscle, in the latter case a more powerful impression was produced on the muscle. We shall perform the experiment.

I dissect out the sciatic nerve of a frog, sever it from the vertebral column, but leave it connected with the leg. I lay the nerve, N (see Fig. 16), upon two pairs of wires connected with a commutator (C). The commutator is, in turn, joined to the secondary coil (n") of an induction machine. When the bridge of the commutator (B) dips into the holes at l_2 and l_3, the electrical current destined to irritate the nerve is sent through the pair of wires placed in connexion with the nerve close to the muscle. When the bridge is disconnected from these holes and dipped into the holes l_1 and l_2, the current is sent through the wires placed at the part of the nerve farthest away from the muscle. We shall first of all find out the weakest current necessary to irritate

the nerve close to the muscle. For this purpose separate the two coils of the induction machine (R' and R") to the

FIG. 16.

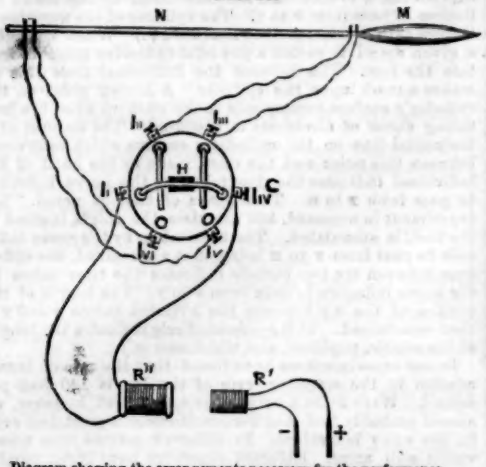


Diagram showing the arrangements necessary for the performance of Pflüger's experiment, de-cribed in the text. N, Sciatic nerve of a frog. M, Gastrocnemius. R', Primary coil of induction machine. R", Secondary coil. C, Commutator, with three pairs of wires attached: one pair to the secondary coil of the induction machine; two pairs placed under the nerve as indicated. H, The bridge of the commutator. (For description of the commutator see Lecture III.)

distance of two feet or so. Set the machine in motion..... The muscle is as yet motionless. Approximate the two coils very gradually, and stop the moment you see the slightest twitching of the muscles.....The toes are now moving very slightly. Let us now turn the bridge of the commutator, so as to send the current through the other pair of wires, and thereby bring about irritation of the distal portion of the nerve.....The muscles of the leg are now contracting much more vigorously. I reverse the position of the bridge, and so irritate again the nerve near the muscle. The movement of the leg is now much diminished. The irritant has all through been of the same strength; how then shall we explain the difference between the results of irritating the nerve near to, and at a distance from, the muscle? Pflüger suggests that the nerve energy, as it passes along the nerve, accumulates power from the particles of the nerve, so that the effect of an irritant is greater the longer the piece of nerve through which the influence produced by it may have to pass. He compares the nerve influence to an avalanche, saying that as it travels along a nerve, its power becomes intensified, just as the avalanche rushes down a precipice with increasing force. Such an explanation seems to me scarcely warranted by the experiment. You will readily understand why. You see that the nerve has been divided near one of the points irritated. Has the division of the nerve had no effect upon the irritability? Rosenthal has shown that when a nerve is cut off from its centre for a time a wave of increased irritability, succeeded by death, very slowly passes from the point of section throughout the nerve. It may be, therefore, that the result of our experiment is simply due to the greater irritability of the nerve near its cut extremity.

NATURE OF NERVE ENERGY.

Some whose opinions are entitled to every respect regard nerve energy as identical with electricity. Perhaps it may at once occur to you that the enormous difference between the velocity of nerve energy and that of electricity is sufficient to show the non-identity of the two forces. The velocity of electricity varies in different conductors, and the velocity with which it can travel through a nerve may therefore be much less than the velocity through a wire. This rapidity is as yet unknown, and therefore we dare not come to a decision regarding this point. It seems to me, however, that the facts which I am about to demonstrate decidedly oppose the idea that these forces are identical. You have seen that if a powerful galvanic current be sent along a nerve, the irritability and conductivity (power of conducting nerve energy) are diminished, and, it may be, even temporarily or permanently abolished. (See Lectures III. and IV.) I take the sciatic nerve and leg of a frog. I pinch the end of the nerve: the muscles contract. Clearly the nerve is at present able to propagate along it the influence produced by my pinch. I now lay that portion of the nerve near the gastrocnemius upon two wires which are the poles of a powerful galvanic battery. We allow the current to flow through the nerve for a few seconds; and now, while the electricity is still passing through the nerve, I pinch it as before. There is no response. The muscle now is unaware of my having irritated the nerve. Why? Because the electricity flowing through the nerve has paralysed it. It is no longer able to conduct nerve energy. Do not for a moment suppose, however, that the nerve can no longer conduct electricity: that is certainly not the case. Why, this very condition of the nerve is being kept up by a current of electricity which is flowing through it.

The influence of other agents which paralyse nerve is also important in this connexion. Let me just mention one of these. You have seen that cold paralyses nerves; but frozen nerves can conduct electricity, although they cannot transmit nerve energy; and, what is more, frozen nerves are better conductors of electricity than those which are not frozen. These facts seem to me sufficient to lead us to regard electricity as something different from the influence which travels through our nerves.

I have hitherto, for convenience, spoken of conduction of nerve energy as if it were a thing which passes through a nerve-fibre as water passes through a tube. Most probably the nerve transmission is not at all like that. The nerve-fibre may be regarded as consisting of a chain of molecules. Some think that when a nerve is irritated these molecules are merely thrown into vibration, and that this vibration passes along the nerve just as, e.g., a vibration passes through this table when I strike it. This vibration may be set agoing by energy generated in a nerve-cell, or otherwise communicated to the nerve. According to this view the conduction of the nervous influence is simply the transmission of a movement from particle to particle along the nerve. Others look upon nerve conduction as much more analogous to the ignition of a train of gunpowder. Apply heat to such a train, and a chemical change, set agoing by the heat, proceeds from particle to particle, each particle undergoing chemical change and liberating energy, which sets up a similar change in the neighbouring particle. This view appears to me the more probable of the two; because, as we have seen, a nerve cut out of the body loses its irritability much sooner if it be stimulated than if it be allowed to remain at rest, and the rapidity with which the nerve dies bears a direct relation to the powerfulness of the excitement to which the nerve is subjected. To me this appears to indicate that there is in the nerve a store of energy which may be drawn upon and exhausted by stimulating the nerve. This energy is probably stored up in certain chemical compounds in the nerve-fibre. The case seems to me analogous to that of a muscle. The muscle contains energy apparently stored up in certain chemical compounds. When contraction occurs, very appreciable chemical changes take place in the muscle. When it is compelled to energise, these chemical changes bear a direct relation to the amount of the muscular action. The muscle, like the nerve, becomes exhausted at a rate which increases with the amount of work which it is compelled to do; and the action of the nerve and the muscle can be brought about by the same kinds of agents. But while there are points of view from which the case of the nerve closely resembles that of the muscle as regards the source of its energy, it must be admitted that while we have positive evidence of muscular action being accompanied by most appreciable chemical changes in the muscle—e.g., the reaction of the muscle changes from alkaline to acid, oxygen is rapidly absorbed, carbonic acid rapidly exhaled, and so on,—we have no undisputed evidence that any similar changes take place in the nerve. True, Funke and J. Ranke maintain that the reaction of a nerve passes from neutral to acid during nerve work; but, on the other hand, Liebreich and Heidenhain deny that any such change can be demonstrated. We must, therefore, await further inquiry into the chemistry of nerves at rest and nerves in action. The investigation of the subject is attended by

much difficulty. It is not, therefore, surprising that as yet so little information has been obtained regarding it.

ELECTRO-MOTIVE POWER OF NERVES.

The particles in *living* nerves have the power of separating the two kinds of electricity, and thus giving to the nerve certain electrical properties which we shall study upon a future day. Meanwhile, let me say that a nerve exhibits electrical properties during both its state of rest and its state of action.

GENERAL FUNCTIONS OF NERVE-CELLS.

It is convenient to regard a nerve-centre as consisting of one or more nerve-cells, although in two great nerve-centres—to wit, the grey matter of the cerebral and cerebellar convolutions—there is a large quantity of a granular plasm existing in a diffused state, and not in the form of cells. Speaking broadly, nerve-cells generate and conduct nerve energy. The liberation of energy is in many instances called forth by the action of nerve-fibres connected with the cell. In other cases the cells *seem* to energise *spontaneously*. It is certainly doubtful to what extent they do this. Possibly many of their actions, which we consider to be spontaneous, are really called forth by influences acting from without. While, however, there is reason for supposing that some nerve-cells may act spontaneously, every fact seems to show that a nerve-fibre does not do this. It does not pass into a state of action of its own accord. It must be prompted by the energy of the nerve-cell, or by some other form of energy. Some nerve-cells appear to exert a trophic or nutrient influence upon the nerve-fibres connected with them. The nerve-cells in the ganglia upon the posterior roots of the spinal nerves seem to exert this influence over the sensory fibres of the spinal nerves, as shown by Waller. When the fibres are cut off from the ganglion, either above or below it, they undergo degeneration.

FUNCTIONS OF NERVES.

One or both extremities of a nerve-fibre seem always to end in a nerve-cell. Nerve energy seems always to pass through nerves in definite directions. Nerves may therefore been grouped into three classes, named with reference to the direction in which nerve energy passes through them. I. Those which conduct from a nerve centre, named centrifugal, efferent, or excitant. II. Those which conduct to a nerve-centre, named centripetal, afferent, or incident. III. Those which conduct between two centres, named intercentral (Hermann). This classification is by no means perfect, but it is in many respects convenient. The centrifugal class of nerves may be further subdivided into—1. Motor; 2. Secretory; 3. Trophic nerves. The centripetal class into—1. Sensory; 2. Those which cause reflex actions; 3. Inhibitory nerves. The intercentral nerves are chiefly found in the brain, spinal cord and ganglia. Their functions are probably the same as those of the centrifugal and centripetal nerves; that is to say, they may minister to sensation, motion, inhibition, &c.; and in addition to the actions which I have mentioned, some of these intercentral fibres are doubtless concerned in various mental processes.

EXPERIMENTAL METHODS FOR ASCERTAINING THE FUNCTIONS OF THE NERVOUS SYSTEM.

The functions of nerves are ascertained by observing what happens when they are paralysed or stimulated. The paralysis of a nerve may result from some diseased condition, or may be brought about artificially by dividing the nerve, tying a thread round it, freezing it, or by the action of various poisons. When investigating the functions of nerve-centres—e.g., the cerebellum—paralysis is sometimes produced by removing the part altogether. We usually stimulate the nerves by electricity, by pinching them, or by applying some chemical irritant directly, or indirectly by introducing it into the circulation.

I shall illustrate what I have been saying by some experiments. We have here a white rabbit. Examine its ears and both pupils, and satisfy yourselves that the one ear is not redder than the other, nor is the one pupil larger than the other. I now cut down upon the cervical sympathetic nerve. Let us take that on the right side for convenience. I expose the nerve about the middle of the neck. I separate it from the superior cardiac branch of the vagus—a smaller nerve which lies close beside the sympathetic, and I put a fine silk ligature round the sympathetic, and tie it firmly round the nerve. The effect of this is to paralyse the nerve as thoroughly as if the nerve were divided. Now compare the two ears and the two pupils again. The vessels in the right ear are much larger than those in the left ear. The right ear is, in consequence, distinctly redder than the left. You see also that the right pupil is smaller than the left one. I shall now divide the nerve immediately below the ligatured point, and then irritate the nerve just above the ligature. In an experiment of this sort, we call this part of the divided nerve its "upper" end; the end of the nerve which lies below the point of section is called the "lower" end. Watch the vessels of the right ear while I faradise (stimulate with faradic or induced electricity) the upper end of the nerve. You see that they contract, and the ear, in consequence, becomes blanched. We shall wait for a few moments until the irritation passes off.....Now look at the right pupil while I irritate the upper end of the nerve again.....You see that it dilates enormously under the influence of the irritation. We have seen, then, that on paralysing the cervical sympathetic, bloodvessels of the ear on that same side dilate, and the pupil on the same side contracts, and that on stimulating the upper or cranial end of the divided nerve precisely the converse takes place in both parts. We therefore conclude that this nerve contains fibres whose function is to cause the vessels of the ear to contract, and the pupil to dilate, and that these fibres convey their influence up the neck. As I want to keep the experiment as simple as possible, I shall not stimulate the lower end of this nerve at present.

I cut down upon the phrenic nerve, and I open the abdomen in order that you may see the diaphragm. You see that at intervals both sides of the diaphragm are drawn downwards. I divide the right phrenic nerve in the neck. Now look at the right side of the diaphragm. It remains quite loose and flabby when the left side is drawn down, instead of being tightly drawn down with it as before. I shall now irritate the lower end of the nerve. Watch the diaphragm. You see that the right half is drawn violently downwards during the irritation, and that the flabby state returns when I stop the irritation of the nerve. We conclude that the right phrenic nerve contains motor fibres for the right half of the diaphragm, and that these influences pass through the nerve down the neck.

I might multiply such examples; but these will, I doubt not, suffice to enable you to understand some points in the method of studying the functions of the nervous system experimentally. Few experiments can be performed on the human subject; but recollect that disease and accident sometimes perform most important experiments for us. Any part of the nervous system may in this way come to be paralysed or stimulated, and we have only to observe the results. In all experiments on the nervous system, whether performed by us or for us, it is particularly important to ascertain precisely the situation and extent of the injury to the nerve-tissue. In the case of the brain and spinal cord this can only be done in most cases by hardening the tissue after death, and then making a careful microscopic examination of it.

Ere I close just permit me to say in this connexion that some knowledge is gained regarding the functions of some parts of the nervous system by comparing their size and development with the functions performed by them in different animals, and in the same animal at different periods of its existence. For example, there appears to be a somewhat direct relation between the amount of grey matter in the convolutions of the cerebrum and the amount of intelligence possessed by different animals, and by the same animal at different ages.

At our next meeting we shall study that which concerns reflex action and inhibitory nerves.

MORISONIAN LECTURES ON INSANITY.—The last lecture of this course, of the first of which we recently gave an outline, was delivered on Friday, the 24th ult., by Dr. Arthur Mitchell, in the hall of the Royal College of Physicians. The subject was the medico-legal relation of insanity to will-making, especially under the conditions of partial insanity and lucid intervals. We trust that Dr. Mitchell's lectures, which, in the greater part of their tenor, may be viewed as supplementary to those of Dr. Maudsley, particularly on the practical side, will be made *publici juris*.

A CASE WHERE AN ARTIFICIAL PLATE WITH FALSE TEETH WAS ACCIDENTALLY SWALLOWED, DISLODGED, AND ULTIMATELY PASSED BY THE PATIENT.

BY HENRY SMITH, F.R.C.S.,
ASSISTANT-SURGEON TO KING'S COLLEGE HOSPITAL.

THE interesting cases of lodgment of artificial teeth by Mr. George Pollock, and the extraordinary instance of the passage of a gold pencil-case through the intestinal canal reported by Sir William Fergusson in the pages of THE LANCET, must be familiar to the profession. To these I have now to add a case of much interest, where a very ugly foreign body, as will be at once seen by reference to the annexed plate, was got rid of safely, partly by the efforts of surgery and partly by those of nature.

On the night of November 30th, 1870, I was summoned to Mitcham by Dr. Hamilton, who had the wisdom to telegraph the nature of the accident; and I thus went down with suitable instruments. I found a corpulent butcher in great distress, he having six hours previously, by some means or other, allowed his false teeth, with their plate, armed, as is seen, with most formidable hooks on either

side, to slip down his throat. He at once sent for Dr. Hamilton, who, on passing his finger down into the pharynx, could distinctly feel the foreign body on the right side; but, unfortunately, he had not the requisite instruments, and in his endeavours to dislodge it, the body got out of his reach.

On my arrival, the patient pointed to just above the clavicle on the right side as the spot where the intruder lay. I at once passed a long pair of crane-bill œsophagus forceps, and imagined I could feel the foreign body, but I could not catch it. I tried carefully again and again with other instruments; but, as considerable bleeding ensued, and as there was great distress on the part of the patient, I determined to push the body down into the stomach, and with that view passed a full-sized œsophagus bougie into the stomach, when the sensation of the presence of the tooth-plate at once ceased.

The patient was ordered to keep perfectly quiet, and to take plenty of gruel porridge and oil. He had no pain at all except for about five hours on the day the foreign body passed away, which event happened nine days after I had pushed it down. The patient has suffered nothing since.

I am aware that it is a dangerous practice to adopt the course I did in this case. I know of two instances where death followed this plan of treatment, one of them from hæmorrhage; but I am not sure that prolonged and forcible attempts to extract such a formidable-looking body would not be attended with as much danger; and there are so many instances on record where such ugly bodies have passed through the intestinal tract with safety, that the surgeon is quite justified in resorting to the expedient I adopted, providing he has first made an effort to extract the substance. The attempts I made were quite sufficient to tell me that I should not succeed in extracting the false teeth; and, indeed, I necessarily put the patient to so much pain and distress, and brought about so much bleeding, that I was only too glad to desist from further attempts. If these attempts do not succeed at once, they are not likely to succeed at all. Remarkable cases have occurred where such foreign bodies have been extracted, and, among others, one happened in the practice of Dr. Vine, who succeeded in extracting with a probang a plate, armed with seven false teeth, an inch and three-quarters in length, and which had become engaged in the lower part of the œsophagus.

Wimpole-street, March, 1871.

CHLORAL HYDRATE: ITS INCONVENIENCES AND DANGERS.

BY J. CRICHTON BROWNE, M.D., F.R.S.E.,
MEDICAL DIRECTOR, WEST RIDING ASYLUM.

Now that the enthusiasm of novelty has worn off, and that the possibilities of adventurous administration have been nearly exhausted, it seems probable that chloral hydrate will take up its proper place amongst remedial agents, and will be regarded with neither unquestioning confidence nor universal distrust. Hitherto the tendency has undoubtedly been to exaggerate its merits. The agreeable character of the inebriation or obliviousness which it induces, the immediacy and obviousness of its effects, and the speciousness of its reputation as a substitute for opium, possessing all its soothing and none of its deleterious properties, have raised it suddenly into the highest place in popular and professional favour, and secured for it a reception more flattering and widespread than has been accorded to any medical agent since the introduction of its great congener, chloroform. A river of chloral has flowed through the land, and all diseases have been indiscriminately immersed in it. Proclamation has been made of its healing powers, but until quite lately little has been said about its treacherous propensities. It seems, however, to be high time that these should be explicitly set forth. When ladies in society are heard recommending chloral to each other as an agreeable restorative after the excitement of a ball-room, and a specific for all the little ailments of fashionable life, it appears to be quite necessary to point out that risks as well as benefits may attend its use. A considerable experience of it in this asylum enables me to confirm observations already made as to some of these risks, and to describe other inconveniences and dangers accruing from its use, which, as far as I know, have not yet been noticed.

When dwelling upon the evils of chloral, I would not be understood to overlook its real excellence. I am far from disputing its usefulness in that department of practice with which I am most familiar. I am persuaded that it has already proved an important adjuvant in the treatment of some mental diseases, and will take permanent rank as a valuable means of regulating nervous action. It is not my purpose here, however, to extol its usefulness, or to define the conditions for its employment. My object is to indicate some dangers which beset its administration, and to show that these are especially apt to be incurred wherever the nervous system is weak or disordered. From the proof of these propositions there will follow as inevitable corollaries that chloral ought never to be taken except under medical advice, and that it ought always to be prescribed with caution and judgment.

Soon after experiments with chloral were commenced in this asylum, in February, 1870, I noticed a singular tendency to flushing of the head and face in many of those patients who were subjected to its influence. It was no uncommon thing to find a pale anæmic patient, to whom chloral had been given, presenting at certain hours of the day a floridness of countenance which would have done credit to the rudest health. Of forty cases in which chloral was tried up to the month of June, and of which I possess notes, this blushing was remarked in nineteen, in greater or less degree; in a few suffusing only the cheeks, but in a much larger number involving the brow, neck, and ears, and assuming a depth of colour altogether unusual in the natural process. In one case, which is characteristic of many, I find it reported that half an hour after fifteen grains of chloral had been taken, the face up to the roots of the hair and down to the ramus of the lower jaw was of a dull-scarlet colour, very persistent under pressure, most intense over the malar prominences and bridge of the nose, and thence shading off in every direction. The ears partook of the same colour, which was also scattered in blotches

over the neck and chest, the lowest blotch being over the middle of the sternum, and the largest about the size of a florin. This singular flushed condition, which was associated with slight contraction of the pupils, injection of the conjunctivæ and excitement of the circulation, continued for about an hour and then disappeared, during a paroxysm of sneezing and emotional perturbation, to recur after the next dose of chloral. Watchful observance satisfied me that this chloral-flushing rarely presented itself after a single or even several doses of the drug, but generally occurred where it had been taken regularly for some little time. When alcohol in any form was taken along with chloral, then its occurrence was much more certain; indeed, the combination of whisky with chloral in treatment came to be considered a sure method of producing it. Once fairly induced, it was not so easily got rid of. The chloral might be omitted, and still it would show itself, after meals, for a week or ten days, and for much longer if the use of chloral had been long continued. It was a source of annoyance to those patients who suffered from it and who were intelligent enough to express their sensations. They complained of burning heat in the face, of feeling "all of a glow," and often at the same time of a sense of giddiness, inability to walk straight or steadily, and confusion of thought.

In seeking for an explanation of this chloral-flushing, it of course suggests itself that there are several analogous states. We frequently meet persons who flush much after eating, or after sitting with their backs to the fire. We meet others who flush in a similar way after partaking of alcohol; and it has been observed that malt-liquors are particularly prone to give this circumstantial evidence of their imbibition in those unaccustomed to their use. Some ladies suffer much from this flushing affliction. If they taste wine, "the sudden blush devours them, neck and brow." One lady of my acquaintance becomes so instantaneously crimson after the smallest modicum of wine, that she has been obliged to adopt total abstinence principles when dining out. Apprehension and trepidation have doubtless something to do with the flushing in her case, as she is exceedingly sensitive about the ruddy foible, the disfigurement which it produces, and the inferences to which it might give rise in readers of the *Saturday Review*. But these are only predisponents after all, for the same thing occasionally happens in her own house in certain states of health. Now in all such cases the phenomena themselves, as well as the rapidity with which they follow the exhibition of their supposed causes, leave no reasonable doubt that they are essentially and directly of nervous origin. Brown-Séquard's researches establish beyond doubt that flushing, such as we have been considering, must be attributed to temporary paralysis of the vaso-motor centres of the head and neck; while Lister's researches guide us to the conclusion that such vaso-motor paralysis is traceable to an inhibitory influence. Some peculiar or violent impression made upon the afferent nerves of the stomach and the minute ganglia with which they are connected originates an influence which is conveyed to the great sympathetic centres, where it becomes an embargo upon the control ordinarily exercised over the dimensions of the bloodvessels. Immediate dilatation of these vessels with afflux of blood follows in those parts where capillary movements are most habitual, and where there is constant exposure to the air. The range of operation of an inhibitory influence, such as that I have been referring to, will of course vary under various circumstances. It may be limited to a diminution or arrest of the vaso-motor functions of the sympathetic centres of the head and face; or it may diffuse its effects more widely, and this it will do in proportion to its intensity and frequency of repetition, and to the degree of enfeeblement or susceptibility of the nervous system generally. It may extend to the spinal cord, medulla oblongata, and neighbouring parts of the encephalon; and this it apparently did in those cases to which I have alluded in which, along with the flushing of the head and face, there was impairment of muscular co-ordination and giddiness. It may also spread its effects over the whole cutaneous surface, as was illustrated in a case under my care in which a few doses of chloral brought on a sharp attack of urticaria, from which the patient had never previously suffered.

On the morning of Nov. 20th, 1870, E. R——, aged thirty, ward 32, was noticed, about an hour after a dose of chloral, to be much flushed, and to present over her whole body a diffuse inflammatory redness so closely resembling the smooth eruption of scarlatina that it was thought prudent to isolate her in the hospital for contagious diseases. Here more characteristic symptoms were shortly developed. A number of long pale elevations, or wheals, showed themselves on the legs, shoulders, and waist, while similar ones could be produced on other parts of the skin by scratching. At the same time, burning, stinging sensations, and a feeling of tightness and hardness over the whole surface were complained of, along with wheezing respiration, sharp pains in the eyeballs, headache, and lassitude. A dose of compound rhubarb powder was administered, and in five hours thereafter (ten hours from the beginning of the attack) the skin had returned entirely to its normal state.

It is clear that in this case the chloral was the toxic cause of the urticaria. It acted just as various kinds of food are known to do in producing this cutaneous neurosis. It produced, firstly, general capillary hyperæmia, due to vaso-motor paralysis; secondly, spasm of the cutaneous muscular fibres, due to irritation of the motor nerves; and, thirdly, hyperæsthesia with modifications of sensory impressions, due to changes in the peripheral extremities of the afferent nerves. Its effects had advanced a stage upon that simple vaso-motor paralysis to which I first adverted.

(To be concluded.)

ON THE

SO-CALLED "BONE-SETTING," ITS NATURE AND RESULTS.

BY WHARTON HOOD, M.D., M.R.C.S.

(Continued from p. 374.)

IN the rupture of adhesions by manipulation, the first principles by which the operator should be guided are—to obtain sufficient firmness of grasp, sufficient leverage to apply the necessary force suddenly, and to apply it generally, in the first instance, in the direction of flexion, before any attempt is made to restore other movements. In their application to individual joints, these principles require certain modifications of detail, to each of which attention may next be directed.

The thumb and fingers frequently require to be made the subjects of treatment. Their several articulations, and especially those of the thumb, are much exposed to injuries (e. g., by a blow from a cricket ball, or in efforts to save oneself from falling), and these injuries are often treated by rest. When the thumb is the part injured, and surgical advice is sought, it is not uncommon for a splint to be put on and for iodine to be applied externally as soon as inflammatory symptoms have subsided. Sometimes, however, the rest is merely in obedience to the instincts of the patient; but, in whatever way produced, it will, in a certain proportion of cases, be followed by painful restriction of mobility. In such cases the mode of procedure is as follows:

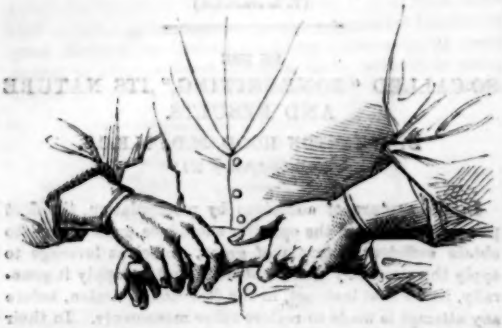
Supposing that an articulation between two phalanges is the one affected, the operator grasps the proximal phalanx firmly between the forefinger and thumb of his left hand, placing the second phalanx of his forefinger on the palmar aspect of the patient's finger, and directly transverse in relation to it, and his thumb on the dorsal aspect. In this position the forefinger of the operator furnishes a steady fulcrum. The phalanx on the distal side of the joint is then grasped by the forefinger and thumb of the right hand, and the joint is sharply flexed to the full extent that the fulcrum finger will allow. It is then with a continuous movement brought back to a state of half flexion, and in that position is abducted, and then adducted, to the limited natural extent of these movements in a healthy joint. It is then straightened, and the momentary operation is complete. The patient, in a properly selected case, will immediately be able to flex and extend the joint without pain, and must be encouraged to bring it into moderate use immediately. It is quite plain that to keep it still at rest, or to put it upon a splint, would be to allow the adhesions to reunite, and all the former troubles to be restored.

The metacarpo-phalangeal articulations are treated pre-

cisely as the phalangeal, with the single difference that the larger size of the proximal bone enables the operator to grasp it with the tips of two fingers on the palmar aspect, while its relation to its fellows renders the forefinger unavailable as a transverse fulcrum. The natural movements of abduction and adduction are also more extensive. In some cases Mr. Hutton would place his left thumb on the palmar aspect of the head of the metacarpal bone implicated, steadying the whole metacarpus with his fingers, and would then push over the finger to extreme flexion, by placing his right thumb on the dorsal aspect of the first phalanx, and employing the necessary force. In these small joints the practice of exerting thumb pressure upon a painful spot is not generally available, as the painful spot is not always present. Indeed, it seems likely that the arrest of mobility may often be due to effusions in the sheaths of the tendons rather than to changes in the structures which compose the joint.

Proceeding to the wrist, however, the thumb pressure becomes important; and here it probably enables the operator to fix the proximal attachment of an adhesion. The manner of manipulating is displayed in Fig. 1. The operator, as here shown, standing by the side of the patient, whose hand and forearm are prone, grasps the carpal extremities of the radius and ulna firmly with the left hand, and places his thumb upon the tender spot. He then encloses the thumb and metacarpus in the right hand, exerts steady traction, impresses slight rotation upon the hand by turning one of its margins downwards while the radius is kept fixed, presses very firmly with his left thumb, sharply flexes the wrist-joint to the full extent, and as sharply brings the hand up again to complete extension; the forearm having been all the while immovable.

FIG. 1.



In this manœuvre the importance of the thumb pressure is manifest; for, as the proximal attachment of an adhesion may be to one of the bones of the carpus, it would be quite possible that the bone itself, unless supported from without, might be dislocated from its position by the force employed. With the aid of pressure, however, such an accident could hardly happen, and the adventitious structure is compelled to yield.

In the case of the elbow-joint, the first care of the operator is to discover in what direction movement is most painful. For this purpose, the arm and forearm being each firmly grasped, he makes an effort at flexion with the hand carried towards the median line, and again with it carried outwards in the opposite direction. He inquires which movement is most painful, and where the pain is felt. The operator and patient then seat themselves with the corner of a table between them, and the operator, placing the back of his left hand on the table, receives the elbow-joint in his palm and grasps it firmly, as shown in Fig. 2 at the same time placing the left thumb steadily on the seat of pain. He then grasps the wrist with his right hand. If the most painful movement was flexion with adduction, he twists the palm of the hand towards the median line and flexes the elbow sharply, at the same time bringing the hand across the chest. If flexion with abduction was most painful, the palm is twisted outwards, and the forearm carried into the position marked by dotted lines in the figure. In many cases both these manœuvres would be performed, the thumb pressure being shifted to the spot especially painful in relation to each; and, lastly, complete extension and rotation would be made. The table on which the left hand of the operator should rest has been accidentally omitted in the drawing.

FIG. 2.

For the shoulder, the principle of action is entirely the same; and the relative positions of operator and patient are shown in Fig. 3, which also very well illustrates the most usual points for thumb pressure. The dotted lines show the positions into which Mr. Hutton was accustomed to move the arm, frequently in quick succession, but always first in the direction in which movement was most painful.

FIG. 3.

In executing these various manipulations, the chief thing necessary is for the operator to have confidence, and to exert sharply and instantaneously the full leverage given to him by the limbs. If he attempt to move them slowly he will probably, in many cases, stop short of doing good—

that is to say, of rupturing adhesions; being deterred either by the resistance that he feels or by the pain complained of by the patient.

It needs no demonstration that a timid operator may easily do mischief by traction upon a joint, which, after all, he fails to relieve, when a bolder and more rapid movement would at once have set the patient free. I am disposed to think that much of the fear of articular inflammation entertained by surgeons is based, if upon any clinical facts at all, almost entirely upon the results of passive motion of an inefficient kind; sufficient to increase the hurtful traction of an adhesion, but at the same time insufficient for its destruction.

In a few cases Mr. Hutton was consulted on account of stiffness about the neck or cervical vertebræ; and he then was accustomed to straighten them in the following way:—His left forearm would be placed under the lowered chin of the patient, with the hand coming round to the base of the occipital bone. The right thumb would then be placed on any painful spot on the cervical spine, and the chin suddenly elevated as much as seemed to be required. As far as my observation extends, the instances of this kind are not *bonâ-fide* examples of adhesion, but generally such as might be attributed to slight muscular rigidity, or even to some form of imaginary malady. The benefit gained was probably rather due to the pain of the operation, and the effect produced by it upon the mind of the patient, than to any actual change in the physical conditions concerned.

My next paper will be devoted to an account of the methods of manipulating the lower extremities.

(To be continued.)

A CONSIDERATION OF THE CRITICISMS ADVANCED ON SIR JAS. Y. SIMPSON'S PAPERS ON "HOSPITALISM," SPECIALLY THOSE OF MR. HOLMES.

By LAWSON TAIT.

THE position I have taken up in this controversy is one confessedly of difficulty and danger; for, on the one hand, I may lay myself open to the charge of following blindly the views of one to whom I, like many others, owe very much; and, on the other, I may be blamed for presumption in criticising the opinions of those far above me in seniority, as in all else, in my profession. I shall, however, as far as possible, avoid the weakness of being *addictus jurare in verba magistri*; and if I have to offer criticisms adverse to the opinions of men like Mr. Holmes, Mr. Callender, and Dr. Matthews Duncan, I trust that they will take them as honestly intended, and arising from a study of the subject as full as I can make it.

At the outset, I may say that I think the choice of the word "Hospitalism" for the heading of the papers was not fortunate. We all owe so much—most of us owe everything—to hospitals, that, whatever be their faults, they should be treated tenderly. Certainly the name ought not to be used as a root from which to coin a word that, in popular parlance, is now a term of reproach. For this reason I shall discard the term.

The first and most conspicuous point of weakness in the arguments of Sir James is to be found in the anonymous returns from private practitioners. It was most unfortunate that he should have chosen to publish those returns without the names attached to them of the gentlemen who supplied them. Nothing was, of course, easier than to cast doubts on these returns; but I am quite sure that it would be little more difficult to substantiate them, were it worth the trouble. But the fact is that those who have criticised Sir James's papers were not cognisant of his method of working. What I can see clearly he meant merely as the last step of his *sorites*, they have understood as his major premiss, and have wasted their energies on what, considering the state he left the argument in, was of comparatively little moment. This is remarkably the case with Dr. Matthews Duncan, through whose elaborate book I have gone carefully without finding anything bearing on any points other than the treacherous memories and the "amiability" of the gentlemen who were asked for returns. When we bethink ourselves that for the "amiability" a much uglier word might be substituted as a tolerably literal rendering, we cannot wonder at the somewhat indignant tone of the letter of Dr. Cullen, of Airdrie, the "marvellous" and "miraculous" surgeon who had 52 amputations without a death, which is to be found at page 547 of the volume of the *British Medical Journal* for 1869. I have gone most carefully over all these returns in the original manuscript, and in every case where suspicion of the correctness of the return could be reasonably entertained I took measures to ascertain the facts; and the errors I have discovered are so trivial in amount as not to affect the general results in the least. Were it essential to my purpose I should at once publish the names of the practitioners along with the returns, and leave the authors to discuss their "amiability" with their critics. I could also easily reconsider Mr. Callender's ingenious twisting of the figures, and show that both for his and Mr. Holmes's position he has really shown too much. But for the present the returns from private practice may be left out of consideration. The comparisons must first be fairly made between different hospitals; and it is very curious to notice how carefully Sir James's critics, with the exception of Mr. Callender, have evaded this. Mr. Holmes Coote has made a special plea in defence of St. Bartholomew's—on the principle, I fancy, of *qui s'excuse s'accuse*; I can see no other reason for it. Mr. Callender has made a collection of statistics of amputations from various hospitals, purporting to be the same, with few exceptions, as those from which Sir James derived his. Mr. Callender's figures are not identified with the names of the hospitals; and I regret that, in a private note, he has informed me that he cannot again go into the matter. His results are utterly irreconcileable with the tables printed by Sir James Simpson; and as in these latter the name of each hospital is opposite the list of its amputations, correction of errors would be easy. I have not yet heard that any such have been found, and I therefore must at present decline to accept Mr. Callender's figures.

One other point of criticism advanced by Dr. Duncan, and I have done with the "Mortality of Childbed and Maternity Hospitals." Speaking of the method of computing hospital statistics, at page 149, he writes as follows: "The proper data for judging of the value of ovariotomy are those from the large and long experience of Wells and Keith. Judged by the Le Fort and Simpson argument, it might be condemned as murderous; judged justly, it is commended as a triumph of modern surgery." Something new this, certainly, for actuaries! And who shall be blamed after this for publishing selected cases? For, after all, the experience of one man, whether favourable or unfavourable, is but a selected case; and even the most fortunate, as in the well-known cases of the Norwich lithotomists, have their averages brought down at last to the usual rates. Have Messrs. Keith and Wells any guarantee that a run of bad luck in the next hundred cases may not bring down their returns to the 50 per cent. which is about the usual rate of recoveries in ovariotomy? Or, should this occur, would any member of the medical profession raise the charge of murder against these distinguished surgeons, which Dr. Duncan so liberally deals out to all, myself included, who, having tried ovariotomy, have not been so successful as Dr. Thomas Keith or as Mr. Spencer Wells? Carrying out his peculiar statistical reasoning, Dr. Duncan tells us further, that "the statement of a mortality of 1 in 29 is a slander on such hospitals as that of Dublin." It is equally a slander on at least three-fourths of England to be told that the district mortality of the country averages 19 in 1000, while in these three-fourths it is really not more than 25 in 1000. Still more is it a slander on us in Birmingham to say that the mortality of large towns is 32 in 1000, while ours is only 23. Would the shareholders of an insurance company thank their managers for basing their system of life acceptance on the tables of Bristol and Birmingham, to the exclusion of Liverpool? If any system of institutions is to be judged, it must be on the whole scheme, and not on a part only; and it is really a matter of surprise that anyone in Dr. Duncan's position could be persuaded to think otherwise, much less to write it.

The fullest criticisms on the "Hospitalism" papers, certainly the best, are those of Mr. Holmes. So much of his

position, however, depends upon the deductions of the Report on Hospitals written by him in conjunction with Dr. Bristowe, that it cannot be fully considered without a criticism of that paper too elaborate for these columns, but which I hope to be able to bring forward elsewhere. I may here state in passing, that a careful examination of that Report, and a comparison of its data with some of my own collecting, have obliged me to come to the conclusion that the former are quite insufficient to support the deductions arrived at by the authors of the Report. The whole question of hospital results is a difficult and complicated one, and it is quite likely that I shall leave it very much as I found it; but I am quite certain that, save in some minor points, Dr. Bristowe and Mr. Holmes have not added much to our knowledge. To come to Mr. Holmes's "reply" in THE LANCET. I must first refer to the regret he expresses "at the too hasty publication, particularly in the ordinary newspapers, of indiscriminate charges against that hospital system which I believe to be the most successful of all our efforts at public charity." It is only too sadly notorious that medical life in the Scotch metropolis is mixed up with personal polemics to a degree that is elsewhere unknown in civilised society; and how much this had to do with those public letters I am not prepared to say. It had its influence I dare say; but it must also be borne in mind that at that time the rebuilding of the Edinburgh Infirmary was being first mooted in public, and hospital construction and its results being amongst the thousand and one varied subjects on which Sir James's vigorous brain had exercised itself, it was not one on which he was likely to be silent when it practically affected the school he had done so much for. Whether the charges were indiscriminate, is still *sub judice;* that they were not immature we know from his writings.

Mr. Holmes criticises at great length, in his first paper, the doings of country surgeons; and, practically, his conclusion about them is this: that, having learnt certain general rules for surgical practice at St. George's and other hospitals during their studentship, they go down to the country and unlearn these rules; for while at the hospital they saw amputations performed in every case where there was a ghost of a chance—and even, according to Mr. Holmes's own showing, in some cases where there was not even that slender thread,—in the country they select their cases, and have better results. If Mr. Holmes would read over the notes appended to very many of the 374 returns received by Sir James, now in my possession, he would there find detailed records of daring surgery—amputations done under apparently the most hopeless circumstances, and done successfully—which rival anything I know of hospital practice, and which I would fain believe would cause him to regret having made such insinuations. If country surgeons as a body do select their cases that they may get favourable returns, have we not every reason to believe that in this, as in most other things, they are addicted to swearing by the practice of their teachers—the hospital surgeons? Or will Mr. Holmes place himself on one or other of the horns of this dilemma: that the country surgeons, after their country experience, find that they have been badly taught; or that there is one rule for amputations in hospitals—to take off the leg because it is Thursday,—and another in the country—to save the leg if possible, and not to amputate simply for the operation. I fear that, from the tenour of a note written by Mr. Holmes in the *British Medical Journal* for Feb. 6th, 1869, he will choose the latter alternative. Mr. Holmes displays considerable ignorance of the practice of the surgeons of collieries and of the habits of colliers when he says, at page 9 of THE LANCET for 1871, that the former select their cases, that the latter are "persons of extraordinarily healthy constitution and habits [!], and that the urban population contains a large proportion of drunken and diseased persons." Some of our black countries have a mortality-rate nearly double that of London; and colliers are about the most shortlived and dissipated class of our population. From a large experience amongst them, I know that they do not recover well from illnesses, still less from operations. Amongst the urban population he finds "the accidents are, in a great majority of cases, the results of intoxication, and occur to habitual drunkards, or they are extensive railway injuries, in which amputation is practised as a last resource"—a set of conditions which, if true of the urban, is equally true of a collier, population. I trust the conclusion of the sentence just quoted expresses a general rule which is peculiar to St. George's; for the practice is more than questionable, "and even sometimes [amputation is practised] as a mere charity to substitute a less for a more painful mode of death." Yet Mr. Holmes says, at page 195 of THE LANCET for 1869, "I admit, of course, that in each individual case success appears not impossible, otherwise the amputation ought not to be performed."

Mr. Holmes has views on the influence of the mere fact of amputation which are so peculiar as to deserve notice. He seems to think that the result is mostly due to the nature of the case and to what has gone before the operation. It is, he says, "only part of the treatment of a surgical case, and that its failure or success depends very commonly on the nature of the case to which it is applied; and this is not shown by a bare collection of figures." Surely Mr. Holmes will admit that in every case there are certain circumstances which lead to or decide against the performance of amputation, and that the limits on either hand are tolerably definite; otherwise surgery is much less of a science than we have been taught to regard it. Then it is not cases of "amputation" we have to consider, but really a number of cases of disease or accident sufficiently serious to require a definite and uniform line of treatment, the rules for which are practically so decided, that in a large collection of cases we are certain, by the ordinary rules of probabilities, to eliminate serious errors and arrive at just results. Various sets of these definite cases, then, treated under various but equally definite circumstances, are fair subjects for comparison. In hospital practice cases must constantly occur—I know they have done in my own experience—where precisely similar reasons in different cases decide the course of treatment as far as amputation is concerned; and in a mass of cases any difference in mortality must be due in very great measure to surrounding circumstances, otherwise we take blame on our own shoulders which may be more safely, and I think more justly and correctly, explained as Sir James Simpson endeavoured to do it. The comparison of amputations in private practice with those in hospitals may be in some respects unfair. I am almost inclined to grant that it is. But the comparison of cases in hospitals containing five hundred beds with similar cases in hospitals containing a hundred is not open to objection; and, if we find that there is the "evidently enormous" difference shown in Sir James's tables, it is indeed time we altered our plans of hospital construction and administration. Amputation deaths influence only to a very slight degree the death-rates of hospitals; but what influences their increase must of necessity influence the increase of the death-rate in other cases; and if we find, as we most emphatically do, that the death-rate of hospitals increases with their size to an extent which is altogether inexplicable by the propositions of Dr. Bristowe and Mr. Holmes, we cannot resist the conclusion that large hospitals are an unmitigated evil. At the Leeds debate, Mr. Hutchinson pleaded that amputations, like confinements, constitute a special class of cases, limited in number and demanding isolation; and that any argument from them is inapplicable to general and medical cases. On the point of isolation Mr. Hutchinson is at variance with Dr. Bristowe and Mr. Holmes; for they consider it safer that all diseases, except small-pox, should be distributed within certain limits in general wards. This seems to me only a matter of common sense. We talk of fever patients "throwing off the poison"; and we are probably literally correct, for they manage to poison others. Then, is a case of fever, individually bad, at all likely to be benefited by being constantly exposed to the castings off of twenty other cases equally bad, or perhaps worse? Are the mild cases in a fever ward likely to be made milder by a continual repetition of doses of poison? It has always seemed to me something like madness to fill a ward with fever cases—pretty much like collecting a lot of burning houses together, the better to subdue the flames. At Leeds we had a very definite opinion on this point from Dr. Gairdner, whose view is that the smallness of the fever hospital meant a corresponding depression of the death-rate. Now, in fevers, as in other cases, the evil of the general aggregation of the sick in large buildings is simply that the chances of centres of origin are very much increased, and the nidus for the spread of the affections is correspondingly large. In fact, it would be a most ex-

traordinary circumstance if, when we find these influences having such a powerful effect on healthy people, it should not be the case that the larger a hospital, the greater, on that account, its mortality. I shall show the effects of aggregation in general cases elsewhere; and, whatever be the results of my investigations, they will be candidly given, whether they confirm or upset my present views. I do not yet know the complete results, but what I have seen of them certainly confirms Sir James Simpson's statements.

(To be continued.)

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

AMPUTATION OF THE THIGH.

(By Mr. HOLDEN.)

On the 25th March Mr. Holden amputated the thigh of a girl about twenty years of age. Seven weeks previously, while coming down stairs in a pair of high-heeled boots, she had slipped down and sustained a compound fracture of the lower third of the femur, with protrusion of the pointed end of the upper fragment through the integument immediately above the upper margin of the patella, and oozing of synovial fluid. Encouraged by the remarkable success of conservative treatment as applied to a case of compound fracture of the patella into the knee-joint some time previously under Mr. Holden's care, the house-surgeon in charge put up the injured limb in splints—a course which Mr. Holden approved on the occasion of his next visit. For six weeks the patient progressed so favourably that recovery with anchylosis of the joint was confidently expected; but a few days before the above-named date the patient had a rigor, the knee-joint became the seat of intense pain, and it soon became evident that amputation was imperatively necessary.

After the operation the articular cartilages of the knee-joint were found to have been the seat of recent acute inflammation; in places they were completely destroyed. It was also noticed that no union had taken place between the fragments of the fractured femur. Though the patient was young and healthy, Mr. Holden's prognosis was not favourable.

AMPUTATION AT THE SHOULDER-JOINT FOR MALIGNANT DISEASE.

(By Mr. SAVORY.)

The subject of this operation was a pale-looking lad of ten years. He is said to have received some time last summer a blow on the shoulder; and shortly afterwards a swelling, which had ever since increased in size, appeared on the part.

On admission, a tumour of the size and shape of half a large orange, smooth, and tense and elastic as though containing fluid, was found on the right shoulder; the superficial veins were rather unnaturally distinct, but the swelling was free from pain; there were no glandular enlargements, and the movements of the arm were quite unimpeded.

Suspecting malignant disease, Mr. Savory confirmed his diagnosis by means of an exploratory incision, and forthwith proceeded to remove the limb at the shoulder-joint. A longitudinal section through the tumour into the head and shaft of the humerus exhibited an excellent specimen of a medullary cancer, which had already invaded the cancellous structure of the subjacent bone to a depth of about half an inch. Mr. Savory ventured to predict that within another twelvemonth, or a little more, the patient would be afflicted with a return of the disease.

ST. GEORGE'S HOSPITAL.

CASES UNDER THE CARE OF DR. JOHN OGLE.

Tumour of the Abdomen.—A highly interesting case of tumour below the right costal cartilages, in the situation of the left lobe of the liver, which attained the size of a hen's egg, and at the same time softened and became superficial. It was opened, and was found to be an abscess. The patient was a woman, aged thirty-nine years, who had only been aware of any swelling in the affected part nine days, but who three weeks previously had had an attack of pain at the pit of the stomach, with sickness. On admission, the liver appeared to be greatly enlarged, and the hard swelling in the abdomen seemed to be continuous with the liver, having a roughened and somewhat nodulated base, which appeared to be the liver itself. Speculations as to whether the swelling was due to a hydatid, or to abscess, or to carcinoma of the liver, or to deposit superficial to the liver, existed. The tumour quickly increased in size, and became fluctuating; it was opened, proving to be an abscess, containing 4 oz. of pus. No bile or shreds of liver-tissue existed in the pus removed, and no "hooklets" were found. The patient is doing well.

Case of Delirium Tremens, with Congestion of the Liver, and Spasmodic Stricture.—The patient was a footman. He had slight but decided jaundice, passed much bile and lithates in acid urine, and every now and then had spasmodic stricture (to which he had never been subject), requiring the catheter, as hot fomentations and baths gave no relief. Chloral was given with good results at bedtime; and alkalies, diuretics, and subsequently vegetable bitters, were given. No stimulants of any kind were administered until the urine and skin showed that the hepatic congestion was being removed, when a little brandy was given with his food, which at first consisted of milk and beef-tea, with light puddings, subsequently of fish, and then meat. After a time the urine became alkaline, and contained a little albumen. He has become very much thinner since his illness began, but otherwise he is now rapidly convalescing. It was found on several occasions that the temperature was high, being 102·2°, again 101·6°, a little later 100·4°, and now it is normal.

Hemiplegia on the Right Side of the Body, Face and Tongue; Memory defective; Speech affected.—The patient was a woman aged thirty-two, who had had a child five years before marriage. Dr. Ogle suspected syphilis to be the cause of the disease; but no proof could be obtained. It appeared that she had been paralysed since a fall which she had in getting out of bed six weeks before admission, after which she lost her speech for some time. She suffered greatly from pain in the head, which did not seem to yield to bromide of potassium, but which under the use of the bichloride of mercury, with iodide of potassium and bark, and blisters to the nape of the neck (one of which was dressed with mercurial ointment), has, after fluctuations, gradually given way, the last report being that it had quite gone. For some days after admission the temperature in the arm on the paralysed side was much lower than that on the other. Thus at the right elbow it was 95·4°, whilst at the left it was 95·6°; at the right hand it was 82·2°, whilst at the left it was 85·2°, there being no difference in the temperature of the axillæ. The temperature of the right knee was two degrees lower than that of the left. At the present time the two sides are much more equal in temperature, and the power in the right limb has been much regained; but speech has not improved.

Severe Case of Acute Rheumatic Fever.—This was a first attack in a patient, aged twenty-three, a brewer's man. Throughout the attack the heart remained quite free and healthy. The case was treated by diluents and opium in some form or other every three or four hours; mainly crude opium, with or without a small quantity of calomel to guard the secretions, but sometimes morphia or Dover's powder. Later on, a little brandy was given from time to time. At the end of ten days the opium was discontinued, and simple effervescing draughts, with neutral citrate of

ammonia, were substituted, as thirst was so intense. He has been gradually improving, and on the eighteenth day after admission, and the twenty-second or twenty-third day of the attack, he walked across the ward. Under quinine he is now rapidly convalescing.

Two cases of Epilepsy. — One case was that of a woman subject to pain in the forehead and lower part of the abdomen, and who associated her epileptic attacks (which appeared to be also partly of an hysterical nature) with irregularity of the catamenia. She was treated by gentle aperients, aloes, and steel, and generous diet.

The other case was that of a man who, whilst in the West Indies, often experienced giddiness. The seizures were always preceded by *cramps* and *numbness* in the left foot, which, as he said, gradually crept upwards until he became unconscious. Dr. Ogle was about to adopt the use of the tight ligature round the left leg on the approach of the attacks, but the patient had to leave the hospital owing to bad behaviour. He was treated with bromide of potassium (fifteen grains) thrice a day, with much relief to his uncomfortable feelings and mitigation of attacks.

Case of a boy aged fifteen, who had had symptoms of a slight attack of *pleuro-pneumonia* a week previously. On admission, from his appearance and history phthisical tendencies were suspected, and this idea was strengthened by the respiration at the apex of the left lung in front being "jerky," and the inspiration "rough." In a very few days, however, the symptoms and all physical signs disappeared, and he went out of the hospital.

Two cases of *syphilitic sore-throat* quickly yielding to iodide of potassium and the use of the gargarisma æruginis. One of these cases was much reduced, being extremely emaciated, decidedly phthisical, covered by dark coppery eruptions, and at first was threatened with suffocation from ulceration of the fauces and œdema of the glottis. The patient has now returned to his work.

Case of a painter, with *blue lead gum-line*, and excessive *pain* in the back, legs, and shoulders. Greatly relieved by warm baths, iodide of iron, and faradisation of the painful parts.

Case of *consolidation of the lung*, apparently from tubercular pneumonia, with pleuritic effusion. Much improving under cod oil, quinine, and good diet, with iodine pigment over the chest.

Case of an anæmic, nervous, hysterical young woman, in the habit of throwing up blood, which had been considered to be hæmoptysis, as she had cough. The voidance of the blood always gave relief to the pain which she suffered from in the chest and shoulders. On examination of the chest, no indications of disease of the heart or lungs were found, and it was soon apparent that she suffered from hæmatemesis, with constipation. Under the use of suitable diet, occasional doses of blue-pill and rhubarb, with hydrocyanic acid and soda, with milk and lime water, sickness and vomiting ceased, and she is now taking steel with aloes and valerian, having a firm and regular pulse.

We saw a case of *saccharine diabetes* treated by Dr. Ogle with lactic acid, in accordance with the views of Dr. Cantani, of Naples. In this case the temperature is not lower than it should be, nor are the respirations more infrequent; on the contrary, they are more frequent both during waking and sleeping hours.

ST. MARY'S HOSPITAL.

CASES OF INJURY TREATED ANTISEPTICALLY WITH CARBOLIC ACID.

(Under the care of Mr. HAYNES WALTON.)

WE are favoured with the following notes by Mr. Bernard O'Connor, the dresser who was entrusted with the immediate care of the cases. This gentleman acquired the theory and art of the carbolic-acid treatment under the personal tuition of Professor Lister.

On the 13th of January last, James T——, aged forty-seven, a commissionaire, was loading a chassepôt rifle, the cartridge of which exploded while it was being lodged in the chamber, and forced back the hammer so as to strike the palm of his right hand.

On admission, a deep cut was seen to extend about two inches and a half down the centre of the palm, and on examination the fourth metacarpal bone was found to be fractured. There were also a cut at the back part of the first phalangeal joint of the little finger, about three-quarters of an inch in length, and a skin wound on the inner side of the ring finger. On account of the severity of the palmar wound it was deemed advisable to leave the fractured bone alone. There not being much hæmorrhage, no ligatures were required, and no sutures were applied to the wounds. Carbolic lotion (1 in 30) was injected into the several parts, and the "protective" and "lac" plasters were applied with all the necessary antiseptic precautions; a pad was placed in the palm, and the two injured fingers, and afterwards the whole hand, were bandaged. The arm was then kept in an elevated position.

Jan. 16th.—Dressings cautiously removed from the palm by first inserting the nozzle of a syringe, emitting the carbolic lotion, beneath the edge of the "lac" plaster, and, as this was raised, allowing the lotion to stream under the "protective," and thus preventing the air from reaching the raw surface. No pus or discharge of any kind was to be seen. The fingers were not disturbed.

18th.—Dressings removed as before. No discharge. The palmar wound is smaller; that on the little finger is not easily found, and there remains no trace of the one on the ring finger. The lotion and the plasters are repeated as before on the palm and the little finger.

21st.—No discharge; dressings repeated.

23rd.—No discharge; the palmar wound is very healthy; the raw surface is very red and vascular; the wound on the finger is not more than one quarter of its original size.

25th.—No discharge; the palmar wound is healing up; the finger-cut no longer exists; dressings once more repeated. Patient discharged. He is able to use his hand very freely. The fourth metacarpal bone presents a distinct dorsal prominence about the centre, which is very painful on pressure. He is recommended to wear a glove containing a pad which will fit into the palm of the hand.

A fortnight after his discharge the patient could move all his fingers freely and shake hands with considerable strength.

Thomas S——, a weak, strumous child, aged three, was run over last summer, and sustained a crushing injury of the left tibia. Shortly afterwards some dead bone was removed from the part.

On admission to the hospital on Jan. 13th, a depression extended in the middle line from immediately below the knee to the instep, and the mark of an incision about six inches long was visible. The parts were of a dark-red colour, and presented a small open wound just below the knee, corresponding to the upper part of the incision.

On the 18th, Mr. Walton, having made an opening about three inches long over the lower end of the tibia, and a little to the inner side of its anterior surface, removed a piece of carious bone of about the size of a shilling. Another piece of bone, also carious, became lodged in the shaft of the tibia a little higher up; and, as it could not be reached either by a bent probe or by forceps, on account of its being confined by a healthy wall consisting of a portion of the anterior surface of the shaft of the tibia, it was thought prudent to leave it alone. The operation itself was not performed antiseptically, but the wound was immediately well syringed with carbolic lotion (1 in 40). Two silk sutures brought the edges together, and the protective and lac plasters were retained in position by means of a bandage.

Jan. 21st.—Dressings removed; no discharge of any sort. The wound is injected with the lotion (1 in 30), and the dressings are repeated.

25th.—Dressings removed; no discharge, not even any fluid on the surface of the wound. The edges of the cut are in close approximation, but at the lower end there is a round aperture, of about the size of a pea; its raw surface is very red and merely *not dry*; the surrounding integument is of a bright colour. Dressings repeated.

Feb. 1st.—Dressings removed; no discharge; perfect union between the edges of the incision; sutures withdrawn. Dressings repeated. Just below the knee, at the upper end of the old incision, and about three inches above the corresponding point of the recent one, there is a small scab, which, on pressure, permits the escape of a bead of pus.

3rd.—A little pus still escapes on pressure of the scab

below the knee; a piece of wet lint is applied, and the part is strapped. The carbolic dressing below is not touched.

7th.—Dressings repeated above and below; no discharge from either wound.

11th.—Dressings removed; lower wound almost healed, no discharge from it; there is a little from the upper wound. Dressings repeated.

16th.—A little raw surface still exists, about the size of a small pea, at the lower end of the incision, which had closed by first intention eleven days ago, and has, with that exception, continued so. Lint spread with zinc ointment is applied to this small raw spot.

18th.—No trace of any opening is observable, above or below, notwithstanding the fact that a piece of dead bone was left in the shaft of the tibia. The patient is accordingly discharged.

George M——, aged sixty-three, slipped down some stone steps on February 4th. On his arrival at the hospital a widely-gaping and deep, irregular cut, three inches long, and situated about four inches above the left ear, was observed; it passed downwards, forwards and inwards, extending about one inch on to the forehead, and described three sharp curves in its course. The anterior temporal artery was cleanly exposed, but there was very little bleeding, and no ligatures were required; the bone was not injured. The wound was well syringed with carbolic lotion (1 in 20); three silver-wire sutures were used to bring the angles of the cut into proper position; the protective and lac plasters, a pad, and a bandage, were then applied.

Feb. 8th.—Dressings removed; not the least discharge; the edges of the wound are in the closest possible apposition; sutures withdrawn. The dressings are repeated to please the patient.

10th.—On the removal of the dressings there is not any sign of the recent cut. The patient is discharged.

William S——, aged twenty-four, a gardener, fell, on February 28th, a distance of twelve feet from a ladder, and lodged in a sitting posture on the sharp edge of a plank. On his coming to the hospital a deep cut about three inches long, and looking as though inflicted with a blunt knife, was discovered on the upper part of the posterior aspect of the right thigh, just below the fold of the nates; the wound extended almost horizontally outwards. It was injected with carbolic lotion (1 in 20). Four silver-wire sutures were applied, one of which was passed through the situation of the orifice of a wounded small arterial branch which had previously bled profusely; the protective and lac plasters were then kept in position by means of a spica bandage.

March 2nd.—Dressings removed; no discharge; the wound looks like a red line crossed by four sutures; dressings repeated.

4th.—No discharge; sutures removed; dressings repeated.

6th.—Last night the dressings had slipped from their position, and this afternoon it is found that the wound, freely exposed to the air, had gaped somewhat owing to the retraction of the lower lip of the cut; a creamy discharge is seen on the raw surface. The lotion and dressings are repeated.

8th.—No discharge to-day; the edges have not united by first intention, owing to the accident already noticed; the retracted raw surface looks very healthy and vascular. Dressings repeated.

13th.—No discharge of any sort. Lint spread with zinc ointment is strapped and bandaged over the wound.

15th.—The part is perfectly healed. The patient is discharged, nine days later than he would most probably have been if the dressings had not slipped out of their position.

In all these cases no more protective plaster was used than was necessary to cover the wound, thus preventing its being irritated by the lac plaster. Exposure of the raw surface to the atmospheric air, and the use of dry lint, cotton wool, tow, or sponges which had not previously been wrung out of a solution of carbolic acid, were carefully avoided.

[Mr. Vernon has been prevented by indisposition from contributing his promised communication on the Therapeutic Value of Iodine in the Treatment of the Syphilitic Diseases of the Eye.]

Medical Societies.

MEDICAL SOCIETY OF LONDON.

MONDAY, FEB. 27TH, 1871.

MR. GAY, PRESIDENT, IN THE CHAIR.

THE PRESIDENT announced the gift of his lectures by Professor Erasmus Wilson, F.R.S.

Mr. BARNES showed the larynx of a man aged sixty-seven who had been accidentally choked by swallowing a piece of orange. Some time previously he had had an apoplectic fit, and the impression of his friends was that he had been seized with another. On opening the trachea, however, the piece of orange was found completely blocking up the entrance to the larynx, as seen in the specimen handed round. No further examination of the body was made.

Mr. HENRY SMITH was reminded of a case that happened twenty years ago at Uxbridge. Two men were fighting after dinner, and one fell down and died at once. Mr. Wakley, the coroner, directed the man's windpipe to be carefully examined at the post-mortem, and in it was found fixed a large piece of meat, which had caused sudden death by choking. Thus the charge of manslaughter against the other man was set aside.

Mr. DAVY drew attention to the complete way in which the wedge of orange had adapted itself to the anatomical conformation of the part, so causing complete obstruction.

Dr. WEBSTER narrated a case where a page-boy was suffocated by a lump of jelly which he was surreptitiously bolting, when he stumbled and fell down the stairs, and was picked up dead with the jelly in his larynx.

Mr. HARRIS remembered a case where a man was brought in dead to the Middlesex Hospital, and at the dissection a mutton-chop, which he seemed to have stolen, was found impacted in his larynx.

Professor ERASMUS WILSON, F.R.S., then read a paper "On Lichen Marginatus" (the Lichen circumscriptus of Willan). Diagrams were handed round showing the concentric rings and segments of rings which this disease formed. The disease was an inflammatory affection of the follicles—a "folliculitis." A cluster of follicular papillæ formed the ring, a line or two broad. It had a tendency to spread in a serpiginous way. There was usually severe itching, and in some cases a gummy exudation. The details of two cases were very exactly given by Mr. Wilson. One was that of a man who had the disease chiefly about the perineum, and who seemed to have got well on a course of mercurial inunction and tonics. The other was a most inveterate case, and occurred in a lady, affecting the whole body; temporary improvement only was obtained. The disease is known as the "dartre of Hindostan, or Indian ringworm." It prevailed also in China; and Mr. Wilson had had put into his hands by Mr. Gay, a communication from Mr. Thomas Powell, medical missionary in the South Pacific Islands,—an account of the disease as it was met with in the Island of Samar, having been imported thither by two men who arrived in a boat from one of the neighbouring islands. Mr. Powell had called it herpes desquamans. Lately Mr. Powell had discovered an insect of the order Muscidæ in all stages of development on the skin of persons attacked. The application of the tincture of iodine had been useful in two or three cases. Mr. Wilson then went on to say that he considered the disease to be between eczema and lichen ruber, and Willan regarded it as an eczema; but as follicular inflammation was the pathognomonic character of the disease, it seemed to Mr. Wilson more allied to lichen, and hence he called it lichen marginatus. In speaking of treatment, Mr. Wilson alluded to the experience of Mr. Nicholson, with whom he agreed as to the value of inunction of mercurial ointments and solutions, while tonics and the ferro-arsenical mixture were given internally.

Dr. TILBURY FOX admired the excellent delineation conveyed by the author's description; he had seen the disease prior to the papillary stage. The term lichen marginatus would embrace all forms of Indian ringworm. Firm friction with a mixture of iodine and colourless oil of tar had proved a good plan of treatment in the hands of Dr. Fox.

Dr. CRISP then read the paper of the evening, on "Small-pox and its Prevention, with a record of experiments upon the lower animals." The subjoined are some of the conclusions arrived at by the author. That no deleterious effect is produced upon the human constitution by the introduction of cow-pock matter, an inference greatly strengthened by the fact that since the introduction of vaccination the population of the United Kingdom has nearly doubled. That government hospitals should be established in the metropolis in suitable localities, and provided with proper vehicles for the conveyance of patients, and with proper heat-chambers for disinfection. That, looking to the important fact that in ten years, from 1851 to 1860, 42,071 deaths occurred in England and Wales from small-pox, and that 35,007 of these deaths were in young persons under fifteen years of age, the recommendation given by the Privy Council and by the London College of Physicians should not be followed, but that, where there is danger of infection, children of all ages should be revaccinated. That there is no sufficient reason why lymph, during the time of an epidemic when it is difficult to procure, should not be taken from adult persons, provided they are free from disease, and the vesicle presents a normal appearance. That more extended observations are needed before we can come to the conclusion that the amount of exemption from small-pox depends upon the number of marks upon the arm from previous vaccination. That for the arrest of this and other contagious diseases a central Board of Health should be established, to regulate all matters relating to the health of the people; and that, irrespective of medical officers of health, who should exist in all large towns and cities, an inspector for each county should be appointed, whose duty it should be to collect and arrange all important information from the medical officers of health, and from the Poor-law medical officers, and report weekly to the central authority respecting the prevailing diseases, and other sanitary matters.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MARCH 8TH, 1871.

DR. BRAXTON HICKS, F.R.S., PRESIDENT, IN THE CHAIR.

Walter Rigden, M.R.C.S., and George Eugene Yarrow, M.D., were elected Fellows of the Society.

The following gentlemen, recommended by the Council, were elected Honorary Fellows of the Society:—Alexander Keiller, M.D., of Edinburgh; George H. Kidd, M.D., of Dublin; and Richard T. Tracy, M.D., of Melbourne, Victoria.

Mr. TIBBS exhibited a Fœtus, the subject of encephalocele. The child presented by the face and was stillborn.

The PRESIDENT exhibited, for Mr. D. Johnson, a specimen of deformed Fœtus, with the placenta adherent to it, there being no funis. Referred to a committee.

Dr. WESTMACOTT showed a remarkable specimen of Corkscrew Funis.

Dr. GRANVILLE BANTOCK showed the Vaginal Speculum of Professor Neugebauer of Warsaw, which he thought was not sufficiently known. It consisted of two parts, the inferior or posterior, and the superior or anterior, exactly similar, and introduced separately. Dr. Bantock considered the instrument more generally useful than any other with which he was acquainted, and he exhibited one made for him, which was longer and smaller than the original pattern.

A paper by Drs. BRAXTON HICKS and PHILLIPS was then read, entitled, "Remarks on Tables of Mortality after Obstetric Operations." It commenced by some general remarks on the subject of statistics, pointing out that to be of any value in medicine it was highly important that the data upon which they were founded were reliable. Strictly speaking they should be absolutely correct. Statistics derived on an extensive scale from incomplete data, though in some instances valuable to a certain extent, were not to be made use of as proof against the truth of another opinion resting on a more sure, though less broad, basis. The palpable vitiating causes of statistics were incorrect data, whether resulting from unreliable sources, or from incorrect grouping and incorrect mode of application. The importance of these considerations was evident when conclusions derived from statistics were brought to bear as a guide to practice. The paper had been suggested by analysing the tables of mortality after operations, quoted by obstetrical authors, and its object was to draw attention to the imperfect mode in which these had been drawn up, and to the delusive conclusions to which they consequently lead. The plan adopted in the paper was that of tracing back to their original sources a large number of the cases which made up the ordinary tables of mortality recorded by almost every obstetric writer. This was done in reference to craniotomy, the use of the forceps, and version; and so far from these operations having a mortality as stated in books, the cases were found to be very few in which the operation could, with any show of probability, be made accountable for the fatal event. In seeking to discover the relative danger of midwifery operations, the authors stated that it should be clearly borne in mind that they were especially performed to counteract the effects of some one abnormal condition, or more than one, occurring simultaneously or consecutively. Extracts of several of the cases were read; and, in reviewing the reports, death could, in the great majority, be clearly traced to the disease for the alleviation of which the operation was undertaken, or to the lamentable neglect leading to the too long postponement of it. Cases of every degree of complexity had been grouped together in the tables, and many a death attributed to an operation which probably would not have happened had the operation been sooner performed.

Dr. CLEVELAND was willing to admit that the authors had clearly made out a case shewing the dangers that were likely to accrue from the use of imperfect statistics; but, on the whole, he was disappointed that they had suggested no remedy. He thought such accuracy of judgment and skill in operating as would insure data for perfectly reliable statistics on a comprehensive basis were scarcely obtainable.

After some remarks from Dr. AVELING,

Dr. PLAYFAIR said that the abstracts of the cases just read showed beyond doubt that the fatal result was in almost all of them to be traced to the unnecessary and culpable delay in resorting to artificial delivery. The whole tendency of modern midwifery seemed to him to show the importance of early interference in suitable cases. The truly scientific practice was not to dread the operation, but to know when and how to resort to it.

Dr. HEYWOOD SMITH thought the paper one of great practical usefulness, inasmuch as by drawing attention to the existence of fallacies in the statistics of mortality after obstetric operations, it opened the way to a more scientific method of operating—viz., when it is determined that an operation is necessary the sooner it is proceeded with the safer for the patient. He suggested the drawing up of a form for circulation so arranged as to facilitate the more accurate and ready registration of all cases of difficult labour.

Dr. MADGE would have been glad to hear from the authors the result of their own practice and experience. In a large midwifery practice during the last sixteen years he had been fortunate enough not to meet with a single maternal death after craniotomy or the use of the forceps. The principle advocated in the paper against delay in employing instrumental or other aid in cases of difficulty was a sound one, and should be strongly enforced.

Dr. ROGERS appreciated the labour expended in examining the original cases, and his experience quite agreed with the results deduced that the great mortality in operative midwifery resulted from delay in interfering.

Dr. HICKS and Dr. PHILLIPS replied.

Dr. BRUNTON read the particulars of a case in which the entire ovum was expelled at the seventh month of gestation, and the child rescued alive, although it must have been born at least fifteen minutes before being taken out of the membranes. Dr. Brunton thought the case supported Sir James Simpson's practice in placenta prævia, of extracting the whole placenta before the birth of the child.

Dr. MADGE said with regard to the absence of hæmorrhage from the placental surface, the case was only an additional proof of the correctness of the views he held on the subject. The mere separation of the two layers of decidua—serotina and uterina—did not necessarily give rise to hæmorrhage. This only occurred when those membranes, from various causes, commenced to break up. The

probable explanation of the child being alive was, that as the fœtus in utero had somewhat of an aquatic existence, it was still in its own element, and for a while not far removed from intra-uterine conditions.

Dr. HEYWOOD SMITH said the child's circulation continued as if it had been still in utero, with the substitution merely of aëration by the atmosphere acting directly upon the uterine aspect of the placenta for the maternal blood.

The PRESIDENT agreed with the explanation given by Dr. Heywood Smith, that as the placenta was exposed to the oxygen of the air the circulation was kept up. The exposure to cold might, at the same time, lessen the demand for oxygen.

Dr. WILTSHIRE said the case had medico-legal bearings. Dr. Cleveland had within the last fortnight been called to a lady at full term, whose child and placenta were expelled with scarcely more than a hæmorrhagic stain on the bed-linen.

Dr. GRIGG said that the practical lesson from Dr. Brunton's case was to take care, should the placenta be expelled before the birth of the child, to expose its uterine surface to the air.

Reviews and Notices of Books.

The Medical Works of Francisco Lopez de Villalobos, the celebrated Court Physician of Spain. Now first Translated, with Commentary and Biography. By GEORGE GASKOIN, K. Commander of R. Military Order J. Christo of Portugal, &c. Sm. 8vo, pp. 312. London: J. & A. Churchill.

FRANCISCO LOPEZ, known as De Villalobos, was born in 1473 or 1474. His grandfather and father were physicians, and he himself appears to have studied medicine at Salamanca. When he was about twenty-four years of age he published the remarkable versified essay, "On the Contagious and Accursed Bubas," which forms the staple of Mr. Gaskoin's work. In 1514 De Villalobos was elected physician to King Ferdinand; and after the death of that monarch he held the same post under Charles I. of Spain, and retained it to an advanced age. The precise period of his death is not known; but it would seem that the end of his long career, notwithstanding his great distinction as a physician and a man of letters, was clouded by neglect. He has stated, in a note upon a canzonette on Death, quoted by Mr. Gaskoin, that "after remaining in the Court till seventy years of age," and doing work which "had not been the cutting up of leather to make sandals for field labourers, but the bringing of healthful restoration to the greatest and highest princes of the earth"; carrying thereto "great store of study," and much night watching, "often with these dry bones of mine stretched out in anxious watching upon the hard, bare floor,.....their Majesties knowing it as they did; for have they not seen it from day to day?—yet never had I a place where I might find shelter in their house, nor have they ever given me food or maintenance for my son, which is the least they might have done."

The literary reputation of De Villalobos was very considerable; and in the first dictionary of the Castilian tongue, published by the Spanish Academy, his use of words is accepted as authoritative. A celebrated Spanish critic, writing in 1786, says of De Villalobos, "He laid open and propagated many truths with freedom and Socratic salt; it is that, indeed, which gives chief value to his moral and political discourses; and there is besides the great merit of his pen in the management of his native idiom, when it stood most in need of writers to soften it down, and give it the grace and sweetness required in a florid style."

The principal medical writings of this distinguished physician of the fifteenth century Mr. Gaskoin now makes known in an English dress. Copies of these writings are rare, and the poem on syphilis is very little known. In addition to this poem, Mr. Gaskoin gives translations of dialogues on tertian fever and on natural heat, and he introduces the translations with chapters bibliographical, biographical, and etymological, and supplements them with numerous explanatory notes.

The chief interest of the work centres in the poem on the Bubas. De Villalobos would witness the earliest spreading of syphilis in Spain; and his poem, Mr. Gaskoin thinks, was probably commenced the year when this disease was first declared—namely, 1494. "He must," writes the latter, "have had the subject continually before his eyes and impressed upon his fancy at this early period of his studies. On the question of its novelty no man would have been better informed; it was the common topic of his age. The people of that day, he says, were all aghast; and even the literate were at a nonplus." As the poet himself writes, as rendered by Mr. Gaskoin, in the third stanza of the poem:—

> "It was a pestilence ne'er to be found at all
> In verse or in prose, in science or in story,
> So evil and perverse and cruel past control,
> Exceedingly contagious, and in filth so prodigal,
> So strong to hold its own, there is little got of glory;
> And it makes one dark in feature and obscure in countenance,
> Hunchback'd and indisposed, and seldom much at ease,
> And it makes one pained and crippled in such sort as never was;
> A scoundrel sort of thing, which also doth commence
> In the rascalliest place that a man has."

From an exquisite satire written by a Spaniard early in the fifteenth century, and quoted by Mr. Gaskoin, a significant illustration is obtained of the amazing prominence which syphilis obtained soon after its introduction into Europe, and the dread which the disease gave rise to. Writing of the "bubous," he says: "Not only is there a worship for their persons, but even for all utensils devoted to their service there is a particular cultus and awe engendered; no one ventures to sleep in their bed, or to put on any of their clothes, to eat of their plate, or to sip of their cup, nor even to sit down upon their chair; for all these things are as sacred vessels, reserved and consecrated to the noble patient. But no wonder, indeed, that the 'bubous' have all this excellence attributed to them, for we know of them, oh great prerogative! that the same work, the very same instruments, which nature preferred and put in use to produce that which is its masterpiece, that one of all its creatures which alone looks up to heaven, even while he treads the ground—that is to say, man—by this same operation, and with just the same instruments, are engendered the most precious and excellent bubas."

This extract is also of considerable interest as showing a clear appreciation (not commonly believed to have existed at this period) of the principal mode of propagation of syphilis. In a subsequent paragraph the writer holds "as of no account" bubas "caused by sitting in draughts." Villalobos recognises, also, the origination of the disease on the organs of generation.

It may be useful here to recall the late Sir James Y. Simpson's valuable paper on Syphilis in Scotland in the last years of the Fifteenth Century, published in the first volume of the Transactions of the Epidemiological Society. Discussing the Aberdeen edict of April, 1497, concerning "the infirmitey cumin out of Franche and strange partis," and an edict of the same town, dated October, 1507, relating to the "seiknes of Naples," Sir James Simpson pointed out that in the first-named edict the aldermen and town council of Aberdeen seemed to have arrived at juster ideas than were then commonly entertained of the laws of propagation of the disease, "and to have distinctly suspected impure sexual intercourse as the mode of communication of the malady." The "Grangore Act" of Edinburgh was dated the 22nd of September, 1497. This Act was directed to be put in execution "for the eschewing of the greit appurand

danger of the infectionne of [our souerane lordis] lieges fra this contagius seiknes callit the Grandgor." Grandgore was the designation frequently applied to syphilis after the appearance of the disease in Scotland. Mr. Gaskoin, in his remarks upon the term *la grande gorre* (p. 219), does not appear to have been aware of its occurrence in Scotch edicts of the last years of the fifteenth century.

The medical scholar and the medical historian are both equally indebted to Mr. Gaskoin for the publication of this translation of the professional works of De Villalobos. The rendering of the poem is to be judged by its accuracy, rather than by its rhythm; and Mr. Gaskoin, we apprehend, would be the last to wish that the talent of versification possessed by De Villalobos should be measured by his own efforts in verbal harmony.

Suspiria de Profundis. Being a Sequel to the "Confessions of an English Opium-Eater," and other Miscellaneous Writings. By THOMAS DE QUINCEY. Edinburgh: Adam and Charles Black. 1871.

THIS is a supplementary volume to the author's previous volumes, and those who are in possession of the latter will therefore do well to purchase this, for it contains the entire remainder of the scattered writings of Mr. De Quincey. If our acquaintance with his writings had been limited to the papers in this volume, we should hardly hold De Quincey in the high esteem that we do as a thinker and a writer. There is the learning and the evidence of a wide desultory reading, as well as the diffuseness of style, that characterise his writings; but we have not come upon anything of very striking merit.

THE ROYAL COLLEGE OF PHYSICIANS.

DR. GEE'S GULSTONIAN LECTURES.

LECTURE III.

IN his third lecture, delivered on March 10th, Dr. Gee continued the discussion of the nature of pyrexia. The proofs of the overgeneration of heat afforded, he said, a sufficient refutation of the alternative hypothesis that fever depends upon diminished loss. It had been shown that the loss, though it might be relatively diminished, was yet absolutely increased in all but the cold stage.

The combination of tissues called the body cannot continue to live under an internal heat of 113° or more, but a lower temperature than that may exercise most deleterious effects. Liebermeister says, "The elevated temperature is not only a pathognomonic symptom of fever, but also the immediate and a sufficient cause of most of its other symptoms." As its consequence the kidneys undergo parenchymatous swelling, and their tissues become charged with albuminous and fatty molecules. So with the muscles. In them also a waxy degeneration has been frequently met with (by Liebermeister in half his fatal cases of typhoid). The heart undergoes softening, or simple albuminous infiltration, changes which are manifested in the increased frequency and increased feebleness of its contractions. The fibrinogenic part of the blood is diminished; there is granular infiltration of the lymph-cells, which seem to be swelled, and at the same time the blood contains many other granules; changes which seem to indicate an augmented degeneration of the blood. The uncontrollable hæmorrhage which sometimes occurs may be the result of a similar degeneration in the vascular walls.

The clinical aspect of pyrexia is better understood. Its effects, when intense or long continued, were considered by the ancients to be due to "putridity." As a matter of fact, patients do sometimes become putrid during life, and after death decomposition advances with astonishing rapidity. The tendency to putridity varies, not only with the intensity of the fever, but according to its specific nature, and also to the state of the patient. Rheumatic fever may be contrasted in this respect with epidemic diphtheria, a disease in which this tendency sometimes shows itself in the highest degree. Putridity, like fever, has probably a tendency to perpetuate and multiply itself, and this is the more likely since local inflammations exercise a very baneful effect upon fevers. Moreover, Liebermeister's opinion is that the unfavourable course which fevers run in the aged, the intemperate, and the fat, is partly due to the existence of degenerations in their tissues of much the same kind as those produced by pyrexia.

How is it that the balance between production and loss of heat ceases in pyrexia to be maintained? In other words, what is the cause of fever? Brodie, in 1810, drew attention to the influence of the nervous system in the production of heat, and again, in 1836, in reference to a case of high temperature resulting from injury to the spinal cord high up. (Several such cases have since been recorded.) Next came Bernard's experiments on the sympathetic, and it was afterwards shown that section of the corresponding portion of the spinal cord would produce a similar paralysis of the vaso-motor nerves. Then Tschechechin took up the subject, and found that division of the spinal cord was followed by depression of the temperature, which he explains by diminished production of heat from interference with the function of the heart and lungs, and by the occurrence of increased loss from dilatation of the cutaneous vessels, just as in varnished animals. The higher up the cord the section was made the greater the depression of temperature; but so soon as the upper part of the medulla was reached, and the cord severed from the pons, the temperature, instead of falling, rose to a great height. He regards it as indicative of an inhibitory power in the parts above the medulla, controlling the independent activity of the cord. Pyrexia is a paralysis of this inhibitory centre, a paralysis which can be induced in sundry ways, as by septic substances and by external irritation. Such is Tschechechin's theory. His experiments on the effect of injury to the cord itself are at variance with the clinical experience of Brodie and others. The depression in some of his experiments may be explained by loss of heat, for when this was prevented the temperature rose. It is probable that nerve-fibres run down the cord which have an influence controlling the combustion processes of the body. When these are destroyed there is an excessive production of heat; the higher the injury the greater the tract of body set free from control, and the greater the production of heat.

Here is reached the utmost limit of our knowledge. Theories of fever which are not open to the charge of explaining the little known by the less known, yet, for the most part, err by narrowing the meaning of the word "fever" to the measure of our knowledge. Theories are either comprehensive enough, and altogether unfounded, or founded on fact, but altogether unable to explain more than a part of the subject. Among the latter are Boerhaave's theory that it is due to increased action of the heart, and increased resistance in the vessels; Liebig's, that it is due to increased combustion of the structures of the body setting free more force than the natural functions require; the theory of the equalisation of external and internal temperatures. Theories less exclusive become at the same time more vague, as those of Virchow and Tschechechin. But although we are not in a position to frame a true theory of fever, something of what is wanted for it may be pointed out. We want to know what are the antecedents of that disturbance of the heat-regulating functions which manifests itself in pyrexia. We want to know the other consequences of those antecedents; what are the concomitants of pyrexia; and we want to know what are the necessary consequences of pyrexia and its concomitants. When knowledge is obtained on these points, we shall be able to define exactly and comprehensively what we mean by fever, and not till then. Pyrexia and fever, words often used as if interchangeable, are not convertible terms. The elevation of temperature is, in fever, due to a special cause, and moreover is not always a constant symptom. In many febrile states the temperature may, by accidental circumstances, be depressed down to or below the normal, and in some diseases, to which the term febrile cannot be denied, as tubercular meningitis, the temperature frequently falls to a low point. The regulating function being at fault in pyrexia, perhaps if we knew in what manner, and by what means, this function is disturbed, we might be able to explain why fever should sometimes be thus accompanied, not by an elevated, but by a depressed temperature.

THE LANCET.

LONDON: SATURDAY, APRIL 1, 1871.

THE amendments carried in the Committee of the Council of the College of Surgeons on the details of the proposed conjoint scheme were briefly as follows. After affirming, as we explained last week, on the motion of Mr. CHARLES HAWKINS and Mr. LEE, the desirability of a *single* examining board for each division of the kingdom, it was moved by Dr. HUMPHRY and Mr. HILTON, "That it is desirable that an examining board should be formed by such licensing bodies as may consent to take part in it, it being understood that each co-operating body shall refrain from the exercise of its previous separate privilege of giving admission to the Medical Register." This would, of course, do away with the anomaly which we have before pointed out, that the Members of the College of Physicians and the Fellows of the College of Surgeons, to say nothing of the graduates of the English universities, would be able to enter upon practice without passing through the professedly sole portal to the profession. Whether the College of Physicians will consent to this remains to be seen; but it would be a very small grievance for the few members admitted annually to pass through the recognised examination, were it only to secure uniformity.

Another resolution, moved by Dr. HUMPHRY and Mr. SIMON, is most important in its bearing upon the proposed scheme, and is as follows:—"That it is desirable, in the opinion of this Committee, that each of the examiners in medicine, surgery, and midwifery, shall be a Graduate in Medicine or Surgery of a British university, holding the highest degree in medicine and surgery of his university; or a Fellow or Member of one of the Royal Colleges of Physicians, or a Fellow of one of the Royal Colleges of Surgeons, of the United Kingdom; or that he shall be, or shall have been, a recognised teacher in the subject in which he is appointed to examine."

It will be remembered that the draft scheme of amalgamation—which from its clear favouring of the Apothecaries' Society may be called the Apothecaries' scheme—allotted half the examiners in medicine, and one-third of those in midwifery, to the nominees of that Society,—practically the present Court of Examiners. Now, without wishing to hurt the feelings of the twelve very worthy gentlemen who fill the posts of examiners at Blackfriars, it would be folly to say that they are in any way representative men of medicine or of midwifery, as sciences, though doubtless they are excellent practitioners of both arts. Though many of them are graduates of Scotch universities, and one or two became members of the College of Physicians in the year of grace when a cheque was the passport to glory, only two, so far as we can learn, have ever taught in any medical school, and these gentlemen only on the subject of medical jurisprudence. It can hardly be said then that they will come within the spirit, even if they do within the letter, of this resolution of the College of Surgeons; and it remains to be seen how they will receive it—we fear but badly, to judge from the tone of their acknowledged organ in the medical press.

We hope that the Fellows of the College of Physicians will assist the Council of the College of Surgeons in repudiating the details of the scheme as originally proposed, which, if carried into effect, will render the scheme ridiculous, and will undoubtedly increase the present want of uniformity in professional licences.

WE desire to call the special attention of our readers to the very interesting series of papers on "Bone-setting," by Dr. WHARTON HOOD, now in course of publication in our columns. We have welcomed these papers, not only on account of their intrinsic merits, but also because they afford the means for the suppression of a widely prevalent and very mischievous form of quackery, which has been based, as every success of the kind must be, upon some neglected or forgotten truth. The late Mr. HUTTON, on whose practice Dr. WHARTON HOOD's papers are founded, was for many years a sort of bugbear to not a few of the most distinguished surgeons of London; and every few months some fresh case was heard of in which he had given immediate relief and speedy cure to a patient who seemed vainly to have exhausted the legitimate skill of the metropolis. In some country places, and especially in mining and other districts in which large labouring populations are much exposed to chances of injury, bone-setters become formidable opponents to regular practitioners, and, like their London representative, have their surprising cures to boast. It is true that they often inflict injury; but this is not the aspect of the case to which our attention should be first directed. They are not valued because they do harm, but because they do a certain proportion of good; and the way in which this good is brought about is the matter of chief interest to the profession.

It is quite manifest that quackery is only an expression of the extent to which legitimate practitioners fail to meet the desires of the sick. These desires may be either reasonable or unreasonable. They are unreasonable when they ask for the cure of an advanced stage of phthisis or other mortal illness; and we can only pity the credulity of those who, suffering from such maladies, are misled by mendacious or deceptive promises. But they are sometimes perfectly reasonable; and then the medical practitioner who fails in fulfilling them is the most effectual, indeed the only effectual, ally of the quack. If he does not know how to fulfil them, it is his duty to learn; and he in no way accomplishes this duty by railing at the quack for his failures, or for any mischief that he may do.

Now, in the particular instance in question, it is incontestable that a large number of irritable and useless joints have been restored to a natural condition by bone-setters after a long period of unavailing surgical treatment, and that the profession has not known how this desirable result has been produced, or what has been the true nature of the lesion treated. The quack always said that a bone was "out," and that he had replaced it; and the doctor knew quite well that these statements were not correct. The

doctor would not meet the quack; and the quack kept his methods secret, and would not show them to the doctor. The quack obtained more credit for a single cure after the doctor had failed than the doctor for a hundred cures in the ordinary course; and the bone-setter, of all quacks, was the one who did most to injure the reputation of the profession. We once heard a military man of considerable distinction describe how his son was instantly cured of a sprained knee by HUTTON, after a distinguished hospital surgeon had treated him to no purpose; and the speaker wound up with the remark, "You doctors are all duffers."

In this state of affairs, we think that Dr. WHARTON HOOD has rendered the profession an eminent service, and that warm thanks are due to him for his candour and boldness. His papers clearly show that surgeons have failed to recognise the minor degrees of false anchylosis by which a joint may be restricted in its movements and kept in a constant state of morbid irritability; and also that they have entertained an exaggerated fear of the possible ill-effects of movement. It is curious how firmly a fear of this kind may be rooted; and yet how little foundation there may be for it in fact. For some years after the invention of the ophthalmoscope, for example, we heard constant warnings of the danger of exposing the eye to light, its natural stimulus to healthy function; and it is possible that the supposed danger of calling upon tender joints for the exercise of their function may be just as little supported by actual experience; or, as Dr. WHARTON HOOD himself suggests, that it may be supported only by an experience of movements made with too little decision to be curative.

At all events, for good or for evil, the treatment pursued by bone-setters will now be fairly before the profession, and scientifically educated surgeons will soon be in a position to define accurately its merits, its dangers, and the limitations of its usefulness. Its application by ignorant men to unsuitable cases has often been followed by injurious consequences; but no such consequences ought to occur in the hands of the profession. We have little doubt that Dr. WHARTON HOOD has really called attention to a neglected corner of the domain of surgery, to morbid conditions that have been only very faintly described in books, and scarcely at all recognised in practice, to precautions that have been either unfounded or exaggerated, and to a method of cure at once simple and intelligible. We hope to see, as the result of his labour, that the art of the bone-setter will become extinct, after having been for a time exercised only upon those cases for which treatment by movement would be really unsuitable, and, as a necessary consequence, hurtful instead of curative. There may be other forms of quackery also under which some valuable knowledge may lie concealed; and no better service can be rendered to the profession or the public than to bring such knowledge to the light of day, and to make it available for the general good.

AN important contribution to the subject of Hospital Nursing is contained in the recently issued volume of the Guy's Hospital Reports, and comes from the pen of Dr. STEELE, in the form of a critical account of the past and present systems of nursing at that institution. The existing arrangements, we are informed, hold, as regards expenditure and the amount and kind of duty imposed on the nurses, an intermediate position compared with those of some of the London hospitals, especially such as are supplied with nurses by certain sisterhoods. At Guy's, much has been done of late, firstly, to augment the number of nurses in proportion to patients, there being at present sixty-nine nurses, about two-thirds of whom are employed on day duty, giving one nurse to every twelve patients in the daytime, and one to every seventeen at night—or, collectively, one nurse to every seven patients; secondly, to separate the work of nursing from that of the ordinary domestic (the scrubbing is now done by a resident staff of six women, occasionally augmented by helpers); and, thirdly, to improve the social position of the nurse. The pay of the latter is £20 a year, with board and costume, equivalent to £17 5s. a year, so that each nurse costs £37 5s.; the entire nursing being estimated at £7 10s. 11d. per bed in continuous occupation during the year. Preference is given to a good class of domestic servants between the ages of twenty and forty. In a building known as Hunt's House, good sleeping accommodation is now provided for the nurses apart from the wards, and in such a way that each has a distinct apartment. Every care has been taken of late to obtain a better class of person for the office of sister, or superintendent, who is responsible for the conduct of the nurses and the domestic arrangements of the wards. They have each a comfortable sitting- and bed-room furnished by the hospital, but they have to provide their own board in great part, an arrangement Dr. STEELE disapproves. It has been found not to work well to promote a nurse to the office of sister, since in performing her new duties she has always been found to be deficient in the necessary authority and powers of supervision. Comparing the nursing at Guy's with that followed at such hospitals as those of King's College and University College, Dr. STEELE remarks that, whilst the presence of ladies secures a decorum and propriety among patients and attendants not always otherwise attained, whilst the sick are indulged in comforts not otherwise furnished them, at the same time there are serious objections in the fact that there must be a duality of government with attendant inconveniences, the sisters and nurses being not officially responsible to the executive, but an outside agency; that misunderstandings with regard to questions of domestic economy involving the spending of a good deal of money must arise, without being economically and at once decided as under a single administration; and that there is a difficulty in refusing recommendations pressed upon the hospital with the authority of those who voluntarily do a large amount of work for the hospital. Dr. STEELE thinks that the operation of these drawbacks in nursing by sisterhoods explains in part the great difference in the cost of administration at some of the hospitals: for example, £77 4s. 10d. per bed at University College, as compared with £39 19s. 1d. at Westminster, or £59 6s. 4d. at King's College. We imagine Dr. STEELE has made due allowance for the fact that the cost per bed in a small as compared with a large hospital must vary somewhat. However, the opinion on such an important subject as hospital nursing, by so able, liberal, and experienced a man as the super-

intendent of Guy's Hospital, deserves the most careful attention. The interesting report which we have thus briefly analysed closes with a sketch of the nursing institutions working in connexion with Guy's Hospital.

WE rejoice to find that Mr. GOLDNEY will not this session pursue his proposal to legislate on the appointment, duties, and emoluments of coroners. We have been foremost in urging the necessity of placing the coroner's election on a better footing. The scandals of some recent elections were notorious. But the question cannot be dealt with piecemeal, especially in the prospect of the great changes which must soon ensue in sanitary legislation. There were, however, special reasons why Mr. GOLDNEY's Bill and its amendments should not be passed. It contemplated most unjust treatment of the medical officers of workhouses; for, if passed, it would have imposed upon them the duty of performing post-mortem examinations and giving evidence before the coroner's jury without a fee. There may be a few cases in which—as at public hospitals—it might be possible to include this duty in the salary, though there are many most serious objections to that course; but, in by far the majority of cases, it would have imposed a new duty, the extent of which it would be impossible to determine, and would have virtually deprived the medical officers of their fair and legitimate reward. Fancy the case of a country surgeon, living four or five miles from his workhouse, being called upon first to go and make a post-mortem, and then again to give evidence, and being told that he would no longer be entitled to his fee. It is not improbable that the letter we published last week has had an important influence in inducing the withdrawal of this Bill. If so, the result may be regarded as a proof, if one were wanting, of the benefit of promptly calling the attention of the profession to a contemplated act of injustice.

We fear this proposal originated in consequence of a Return which has just been published by the Poor-law Board, and which some persons seem to think an evidence of some great abuse. That Return shows that, of 418 inquests held in the metropolitan workhouses last year, no less than 208 were held in St. Pancras. But, so far from proving that the practice at St. Pancras is wrong, it proves rather the contrary, and suggests that in the other workhouses more inquests should have been held. One thing at least is proved—that the holding of inquests is determined by no principle whatever, and that the public has no guarantee that cases of ill-treatment or neglect shall not escape inquiry. It is, in our opinion, desirable that there should be a closer relation between the sanitary authorities and the coroner than now exists; and this relationship can only be determined when the question of sanitary reform is brought before the House.

AT this moment there exists a better opportunity for conjoint action in favour of medical legislation than has occurred for a long time past. Of four schemes that have been proposed for securing that grand essential of true progress, a sufficiently high general level of education, two have practically fallen to the ground. The scheme for a Conjoint Examining Board, to be formed by the two Colleges and the Apothecaries' Hall, has virtually received its *quietus* in the discussions of the last meeting of the Council of the College of Surgeons, and its authors have some reason to be thankful that it did not die a more violent and ignominious death. Matters had reached a pretty pass when it became evident that the new examining board—which it was hoped would obtain the privilege of testing the acquirements of every candidate for practice—was to contain as many representatives of Apothecaries' Hall and the Hall ideas of medical science, as of the College of Physicians, which necessarily includes the *élite* of English medicine. It is so demonstrable that the Colleges would never have consented to such terms, except under the powerful pressure of interested motives, that the scheme was judged and condemned from the first, for that reason alone, without counting plenty of other objections equally strong.

The scheme which calls itself that of the British Medical Association has also collapsed; and there remain in the field only THE LANCET Medical Bill, and the Bill of the Irish Colleges introduced by Mr. BRADY. If the profession sincerely desires reform, it can now, by expressing its opinion decidedly in favour of THE LANCET Bill, which is to be read a second time on June 14th, secure at least a very important first step to the attainment of that object; for, even if it should prove impossible to pass anything through Parliament this year, the enunciation in the House of Commons of the main principles for which we are striving, and the out-spoken support of them by members who could say that they represent important masses of medical opinion, would effect the greatest possible good. And, failing decisive legislative action, we should desire nothing better than that THE LANCET Bill and Mr. BRADY's Bill should be both referred to a select committee; for there would be ample opportunity before such a committee for the calm and temperate discussion of the opposite principles of popular and of corporate representation in the governing body of the profession, and of other important questions which could be even better discussed in this manner than in the House itself.

Medical Annotations.

"Ne quid nimis."

ANOTHER "RECTIFICATION OF FACTS."

WE believe it was Mr. Snodgrass, or some other ordinarily pacific hero of fiction, who described himself as being "very terrible when he was roused"; and, in the imaginings of the camarilla which pulls the strings of the British Medical Association, we fancy that a similar description would be thought to apply to their "organ," the *Journal*. This remarkable publication, apparently forgetful of the fact that irritability is only debility excited, has assailed us in a diatribe of hysterical and ludicrous fierceness. Pouring forth bad language with a homely and unconscious profusion that reminds one of M. Jourdain's prose, the writer calls THE LANCET by many opprobrious epithets. We are "rancorous," "mendacious," "malicious," and a greater number of other unpleasant things than we care at this moment to enumerate. Upon such subjects the *Journal* is so excellent an authority that it requires some boldness to impugn its statements; but it is open to us to observe that, conscious

of our own innocence, we hope and believe that these accusations are not brought forward in entire sincerity. We can find no shadow of foundation for them beyond the circumstance that we have made a mistake in the precise title of offices in the complicated inner life of the Association; but then this inner life is among the things upon which too much daylight does not shine, and which "no fellow can possibly be expected to understand." Whether the five eminent persons to whom we have referred were members of a Reform Committee, or a Committee of Council, is a matter of about as much importance as whether they wore light coats or dark ones. The fact remains that they seceded from something in the Association on the Medical Reform question; and that they collectively far outweigh those whose names are now paraded as actually constituting the Reform Committee in its original entirety.

The writer at whose work we glance speaks of our "fear and hatred of the British Medical Association." He styles his odd article "*a rectification of facts*"; and in this particular, if he has not rectified facts, he has at least disguised them. THE LANCET entertains the highest esteem and regard for the gentlemen who constitute the bulk of the Association; whilst it looks upon the ruling junta simply as another example of the little wisdom with which the world is governed.

We do not choose to pursue this subject further, or we might point out that the article to which we refer departs from accuracy, not in matters of detail, but in matters of principle, by evasions and false suggestions, as well as by absolutely unfounded assertions. It is not true that THE LANCET has ever attacked the British Medical Association; although it has tried, and may perhaps be compelled to try again, to rouse the general body of members from their supineness. It is not true that THE LANCET Bill has been an impediment to medical reform; because it was first in the field with reference to the present session of Parliament. It is not true that we have ever suppressed facts which were of any interest to our readers, or that THE LANCET Bill has been in any sense an advertisement of a paper. By the favour of the profession, we need no advertisement; and our Bill is simply an effort, in acknowledgment of that favour, to harmonise the conflicting interests which our central position enables us to perceive and appreciate.

With regard to Mr. Headlam, we have nothing to add to our former statement. As soon as THE LANCET Bill was prepared we sent Mr. Headlam a copy. That gentleman wrote to us in acknowledgment of it early in December. He said that he approved of the principles on which the Bill was based, and he did not say one word in criticism of the details. What the principles of the Association Bill may be we do not know; for, as far as we can learn, the unfortunate bantling has not yet seen the light of day, and is even now not wholly free from the danger of being changed at nurse. Until it appears before the public, and for the differences between its assumed provisions and those of THE LANCET Bill, we may refer our readers to the letter from Dr. Balbirnie which appeared in our last issue, after having been refused insertion in the *British Medical Journal*.

A CORONER UPON STILTS.

AN inquest has recently been held near Dymock, on the body of a young woman named Elizabeth Goode, the daughter of a labourer, who had returned home from London pregnant, and who gave birth to twins between three and four o'clock on the morning of the 13th March. According to the newspaper report, which is all that has reached us, the case was too difficult for a midwife, and the woman's father went, at half-past seven in the morning, to Mr. Cooke, of Newent, the union medical officer, to ask for his attendance. The father had no order, and no means of paying, and Mr. Cooke refused to go. Later in the day (at 5 P.M.), the father went to Mr. Wood, of Ledbury, who attended, but only to find that the woman had just died. At the inquest Mr. Cooke was present, and explained that he was under no contract or obligation to attend without an order; and that fees had been refused to him by the board of guardians on former occasions on which he had so attended. Upon this the coroner was seized with a paroxysm of cheap indignation, and seems to have abused Mr. Cooke roundly; saying that he deserved severe blame. We wish to put the saddle on the right horse, and to point out that the blame should rest on the board of guardians or nowhere. Without an order, the poor woman had no more claim upon Mr. Cooke than upon the coroner himself; and Mr. Cooke is a gentleman who has been more than forty years in practice, and who has reached a period of life at which he cannot be expected to be at the beck and call of every girl who has the misfortune to have an illegitimate child. There are five other medical practitioners in Newent; and there could be no object in troubling Mr. Cooke about the case, excepting as union medical officer. Now the fact is, that medical men are far too fearful of claptrap charges of inhumanity; and boards of guardians trade upon this fear for the purpose of evading fees. They argue that if there is a case of urgency the doctor will be sure to go without an order, and that thus they will be able to escape payment; and we think it is a matter for congratulation when we find a doctor who, having been thus caught, refuses to fall into the same trap again. The remedy for the numerous scandals arising out of the present state of the law would be to give the parish doctor, in any case represented to him as very urgent, an absolute claim against the guardians for his fee; and to give the guardians a remedy against the patient or his next friend, if the case were one in which there was no claim for relief. If the doctor is do to the work there should be no question or doubt about his payment; and the observations said to have been made by the coroner were equally silly and impertinent.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

THE President and Fellows of this corporation gave a *conversazione* on Wednesday evening, the 22nd ult. Upwards of 500 invitations had been issued, including one to nearly every licentiate in Scotland; and about 330 gentlemen were present. This number, though chiefly composed of practitioners from Glasgow and the West of Scotland, included licentiates of the Faculty from counties so far north as Inverness, and so far south as Dumfries and Galloway. The walls of the reading-room, which was used as a reception-room, were decorated with pictures, including an original portrait of Jenner by Sir Thomas Lawrence. The second suite of rooms includes the examination hall, in which hang the portraits of Dr. Peter Lowe and the other founders of the Faculty, those of Cullen, Black, Dr. John Moore, Dr. Robert Watt, with those of several of the former presidents still living. In an adjoining room was a large collection of microscopes, under the charge of Dr. John Wilson. The principle adopted in the arrangement of the microscopic objects had been to show first the healthy tissue of an organ, and then the various morbid modifications of it. The collection was, therefore, one of great interest, and was evidently appreciated by the large numbers who crowded the room. In the upper suite of apartments there was a varied display of objects to suit different tastes. In one room Mr. Hilliard showed a large collection of every-

thing new in the way of surgical and obstetrical instruments; in another were several useful improvements made by Dr. St. Clair Gray on some of the usual apparatus for detecting poisons; a third was set apart to new pharmaceutical preparations, under the care of Messrs. Murdoch; in a fourth was a curious collection of objects of general and medical antiquarian interest. Perhaps the most interesting article here was a MS. book without date, but, from internal evidence, written about the beginning of the 17th century, partly in German and partly in Latin, and illustrated with several hundreds of quaint pen-and-ink sketches, showing the more prominent characteristics of various forms of disease. Other rooms contained novelties in splints, pathological preparations, objects of art, &c. At 9 o'clock the company assembled in the large hall, when the President, Dr. Fleming, delivered a short address of welcome; after which Mr. Herchell, Professor of Physics in Anderson's University, gave a successful demonstration, with commentary, of Tyndall's experiment on Haze and Dust. An adjournment was then made to the library, where refreshments were provided; after which the company employed themselves in again inspecting the many objects of interest, renewing old acquaintanceship, &c. The meeting was in every respect highly successful.

THE MODE OF TERMINATION OF NERVES IN FISHES.

M. JOBERT and M. GRANDRY have recently communicated to the Society of Biology (*Gaz. Méd. de Paris*, No. 10, 1871) the results of their inquiries upon this subject, which were chiefly conducted on river fish, and especially upon the carp, the lips being the part selected for examination. The lips are covered by several layers of epithelium, of which the deepest are elongated and arranged in the form of palisades in close order. Above these is a layer of rhomboidal form, and those that are still more superficial are successively round, and more and more flattened. The flask-like cellules described by Leydig under the name of mucous cells, which secrete in their interior, and by their dehiscence discharge the mucus, covering the surface of fishes, are deeply placed. The simple and compound papillæ of the cutis project into the epidermis, and are hollowed at their extremity into the form of a cup, at the bottom of which is an ovoid organ that on account of its peculiar shape has been named the "cyathiform" organ by Leydig. Each dermic papilla contains a vascular loop, and two nervous fasciculi that run towards the apex. At the level of the bottom of the cup the nerve-tube disappears. These nerves, as shown by the action of perosmic acid, contain the white substance of Schwann. In specimens macerated in weak chromic acid the bottom of the papillary cup may be seen to contain a granular substance, amongst which highly refractile nuclei are scattered. In almost all instances, part of the epidermis and cyathiform body disappears after maceration, showing that this consists of two very different elements. The cells of the periphery already figured by Leydig are fusiform, with a nucleus at their upper extremity; and he supposes they are contractile, with which statement, however, the authors are unable to agree. These cells are inserted into the border of the papillary cup by a finely dentated insertion. The granular mass contained in the cup formed of nuclei becomes transformed into fibrils, from which extremely fine and highly refractile filaments are given off. These constitute the second element, or central portion, of the cyathiform organ; and it is this which the authors regard as the true termination of the papillary nerves. The peripheric element they consider to be only protective, and as belonging to the epithelium. It is important to notice that the superior portion of the cyathiform body traverses the epidermis, and is in immediate contact with the surrounding fluid, and this may, in fact, be seen scattered over the surface on a flat view. M. Jobert continued his researches at Arcachon on the Mullus barbatus, or mullet of the ancient Romans, employed to make the *garum*, and the death throes of which were watched with pleasure on account of its brilliant and changing colours. In this fish the cyathiform bodies are very large, amounting to one-tenth of a millimeter, and the structural characters above described are more clearly visible. Section of the nerve alters the structure of the cyathiform body.

THE FACTORY ACTS AND WOOLWICH ARSENAL.

A SHORT Parliamentary paper on this subject has just been issued, which contains the solution of a vexed question that had arisen between two departments of the Government. More than six years ago the authority of the Inspectors under the Factory Acts to exercise any jurisdiction over the Royal Arsenal at Woolwich was disputed by the War Secretary, and Mr. Redgrave was directed to withdraw his inspector from that establishment. Much foolscap and red-tape have since been expended on the subject, but the sudden death of a lad employed in the Arsenal, which occurred in November of last year, and the inquest resulting therefrom, drew public attention to the matter, and revived official correspondence between the War and Home Offices. We took occasion at the time to state our entire concurrence with the opinion of Mr. Redgrave, to the effect that the Royal Arsenal, in common with the Mint, the Inland Revenue, the Printing Department of the Foreign Office, and other Government establishments, should be subject to the factory regulations imposed by the Acts. It is satisfactory, therefore, to observe that "the Secretary of State for War has given instructions that the provisions of these Acts may be at once carried out in the Royal Laboratory." This order was necessary, not only as regards the health and education of the children employed, but as a matter of principle, for it is suicidal to permit sanitary laws framed by one department of the State to be deliberately and systematically broken by another.

ANTI-VACCINATIONISTS AT GATESHEAD.

A PUBLIC meeting has been held in Gateshead, at which a resolution was passed against the continuance of the compulsory vaccination laws. The usual amount of nonsense, and the usual misconstruction of the plainest facts, characterised the proceedings, excepting the speech of the Mayor, who, under a modest disclaimer of knowing anything of the subject, made the only sensible speech, remarking that if they could prevent a greater evil by enduring a lesser one, it would be a good thing to suffer the lesser. To the credit of the profession at Gateshead, no local practitioner appeared at the meeting. "Dr." Pratt came all the way from Durham to distinguish himself and help the cause of the anti-vaccinationists. We do not hope to make any impression upon this gentleman. He declared in the course of his speech that "of the two evils, small-pox was the least." All reasoning would be lost upon a man who has no more respect for facts and for the reputation of his own intelligence than to make a statement like this. We only ask sensible people at Gateshead to consider two things: First, that though the majority of the cases of small-pox in the London hospitals occur to vaccinated people, simply because the great majority of people have been vaccinated, and a first vaccination, especially if not thoroughly done, is not a permanent protection; yet that the mortality of those vaccinated is 9·8 per cent., while that of the unvaccinated is 45·8 per cent. Secondly, that

Dr. Grieve in his account of 800 cases at the Hampstead Hospital, published in THE LANCET of March 18th, said that he had not met with one case of small-pox occurring after a provable revaccination. What is the inference that wise people will draw from these facts? What but this, that, instead of less vaccination, we want more; and that, instead of abolishing a law which compels vaccination in infancy, we should extend it, so as to compel revaccination when the effect of the first vaccination declines. We warn those who have not been revaccinated that they will run a great risk of contracting small-pox for months yet to come.

SOCIAL SCIENCE ASSOCIATION.

ON Wednesday evening Lord Shaftesbury presided at a meeting of the Social Science Association, at which a paper was read by Mr. Michael on the Sanitary Report. The learned reader criticised the labours of the Royal Commission with great severity. He complained of numerous sins of omission and commission, but most of all that the Report gives no countenance to the views of the Association in respect of the inauguration of a system of State medicine, the division of the country into special districts for sanitary purposes, and the proposal to employ guardians and their medical officers as local authorities. The Report of the Commission was well defended by Mr. Powell, one of the Royal Commissioners, and the principles of the Report were advocated by several other speakers. Lord Shaftesbury thought the differences between Mr. Michael and the Commissioners were reconcilable, and he hoped that all would cordially unite for the purpose of obtaining immediate legislation, for if it were necessary to wait for a perfect scheme no one in the room would live to see it carried out; in fact, he had no faith in anything but piecemeal legislation.

THE NAVAL MEDICAL SERVICE.

IT is satisfactory to know, according to the *London Gazette* of the 28th ult., that "the Queen in Council has approved of a memorial, which has been before the Lords Commissioners of the Admiralty, which recommends her Majesty, by Order in Council, to establish one pension of £100 a year for inspectors-general of her Majesty's hospitals and fleets, and two additional pensions of £50 a year each for staff-surgeons and surgeons of her Majesty's Navy." In spite of the cheeseparing proclivities that still prevail, my Lords at Whitehall are gradually awaking to the fact that there is a screw loose somewhere in the medical service of the navy, and hence that it is incumbent on them to, at all events, apportion the plums of Greenwich Hospital with something like even-handed justice. It would be unjust, however, in quoting the above memorandum, not to mention, in connexion therewith, the name of the Medical Director-General of the Navy, through whose exertions, as we believe, this recommendation was placed before her Majesty, and whose energy in the cause of the naval medical service is constant and superlative.

CHINA AND THE CONTAGIOUS DISEASES ACTS.

IT is not many years ago that Hong Kong enjoyed a very unenviable notoriety among our soldiers and sailors for the amount and very formidable nature of the enthetic diseases that prevailed there. We have just received a copy of the report of Dr. Murray, the Colonial Surgeon for Hong Kong, for 1870, from which we learn that this station has undergone a remarkable change in this respect. It so happens that the Deputy Inspector-General of the Naval Service, and the surgeon of the 75th Regiment, at present stationed at Hong Kong, have both had previous experience of the place, and they are therefore able to judge of the contrast between its condition now and what it was before the introduction of the Contagious Diseases ordinance into the colony. The former says, "Judging from my own experience I should say that syphilis had all but disappeared from the colony"; and the latter writes, "I may add that during an experience of sixteen years as an army medical officer in all climates, I have not seen a similar immunity." In a table appended to the report we find evidence of the continued diminution of these diseases. The percentage of contagious diseases contracted in Hong Kong to all admissions was 8·96, against nearly double that amount in 1869. In the garrison the percentage of primary disease to the total strength was reduced to 5·51, against 6·83 in 1869; and among the British ships of war which have visited the port during the year, only 116 cases of contagious diseases were contracted in the colony. In the police a similar improvement has taken place, and the percentage of infection has been reduced from 16·66 in 1869, to 13·75 in 1870. The type of the disease has also been undergoing steady improvement under the strict surveillance carried out; the average number of days of treatment having further diminished from 24·8 in 1869, to 23·1 in 1870.

CORONERS AND NEGLECTED CHILDREN.

WE are glad to see indications that medical coroners consider the cases of children who have been allowed to languish and pine away, from neglect or apathy, to be within the fair range of their inquiries. Dr. Young, of Salisbury, has held an inquest lately on one or two children who have been simply permitted to lapse into a dying state, without any effort on the part of their parents to seek proper assistance and relief, medical or otherwise. This is a form of crime that needs to be exposed, and we hope that all coroners will follow the example of Dr. Young, and by so doing teach the mothers of children that "childward care" which is the first and only security for infant life. Another way of letting children die is to let them go unvaccinated and catch the small-pox, which actually kills one unvaccinated child out of two whom it attacks, and leaves the rest disfigured and perhaps blind for life. We all know what Dr. Lankester has done to prevent this form of infanticide, and we believe that Dr. Young also has determined to hold inquests on all unvaccinated children who die of small-pox in Salisbury.

LAMBETH POTTERIES.

A SURGEON writes to *The Times* to complain of the dense smoke which proceeds from the Lambeth potteries, and passes over St. Thomas's Hospital. He states that this smoke is always more dense on Fridays than at any other time, and that it consists largely of arsenical fumes of a highly poisonous character; and he calls upon the Metropolitan Board of Works to deal promptly with the evil. It would, perhaps, be more reasonable to appeal to the authorities of St. Thomas's to take measures to put the law in force against the offenders. There can be no doubt that the fumes of manufacture would be very seriously hurtful to certain classes of patients. Many years ago, a nuisance of this kind was a well-recognised evil at another great hospital, but the smoke-maker was so large a contributor to the funds that the committee did not venture upon declaring war against his chimneys. At St. Thomas's, where there is a large endowment, no scruple of this kind need stand in the way of taking due precautions to preserve the health of the patients.

It is said in last week's *South London Press* that the medical officer of Lambeth has declared the smoke from

the potteries to be of "a twofold character—local and imperial"; that the chimneys emit a black smoke and a white smoke (or vapour), and that the local authorities cannot deal with the latter. We do not profess to be lawyers, so the Smoke Acts, which seem to us to be clear and precise enough in their intention, may have some literal flaw that we fail to recognise. The Act of 1853 refers to any person who shall "use any such furnace which shall not be constructed so as to consume or burn its own smoke, or shall so negligently use any such furnace as that the smoke arising therefrom shall not be effectually consumed or burnt, or [shall carry on any trade or business which shall occasion *any noxious or offensive effluvia*," &c. This Act excluded glass and pottery works, but by a subsequent Act (1856), the exemption was removed. Thus far the law seems fine enough in its meshes, and we are, therefore, led to ask whether the local authorities of Lambeth (probably composed to some extent of the leading potters) have done all in their power to enforce the law, and also whether, as the result of failure in that respect, the intervention of the Secretary of State has been sought?

A PROFESSIONAL GRIEVANCE.

SOME letters in the *Broad Arrow* have called attention to a grievance under which our brethren practising in garrison and sea-port towns suffer at the hands of their naval and military *confrères*, more we believe as the result of inadvertence than from any wish to do an injury. It is this: that the civil practitioner found every now and then that some of his best patients avail themselves of the acquaintance of military or naval surgeons to procure—what is so dear to the prudent materfamilias—a little medical advice *gratis*; and that in some cases which have been brought under our notice, this gratuitous assistance has gone the length of vaccination of an entire family circle.

We are sure that we have only to call the attention of the naval and military *medicos* to the unfairness of thus requiting the local practitioners for the professional assistance always cheerfully rendered to the families of medical officers of the two services, to ensure an avoidance of any encroachment upon the legitimate emoluments of the civil practitioner. We all know how constantly kind friends worry us to prescribe offhand for their real or imaginary ailments, and probably the best way out of the difficulty is to declare the case to be too important to treat without "knowing the constitution."

MEDICAL ORDERS FOR PAUPERS.

WE have had repeatedly to complain of the laxity with which orders are given for medical attendance and relief. A marked case has recently occurred at Worcester, where it appears that these orders are dispensed, in the absence of the relieving officer, by an aged pauper. Under such circumstances no inquiries are made, and it is not surprising that the doctor, at his visit, finds himself in presence of a person far above the condition of pauperism, with bread and butchers' meat in abundance in the house, and the name inscribed in his own ledger as a "private patient." We are glad to observe that the guardians, in seeking to charge the medical officer, Dr. Woodward, with neglect, have ordered the whole circumstances to be submitted to the Poor-law Board. We have no doubt that Dr. Woodward will be absolved from blame, but we have less hope that any proper instructions will be issued for the administration of medical relief. It is an unfortunate circumstance that medical orders appear to cost nothing, being included in a contract; but if the guardians were wise they would see how that laxity in their administration increases pauperism.

EASTER MONDAY VOLUNTEER REVIEW.

MR. CORDY BURROWS, Surgeon 1st Brigade Sussex Artillery Volunteers, has been appointed to assume the charge of the different field hospitals at the Easter Review. We may add that we understand he has forwarded invitations to the various members of the medical staff to breakfast in the Royal Pavilion on the morning of the Review; and in case of any member not receiving such invitation, Mr. Cordy Burrows requests us to state generally that he hopes to have the pleasure of seeing them. Breakfast will be on the table from nine to eleven o'clock.

THE METROPOLITAN ASYLUMS BOARD.

AT a recent meeting of the Metropolitan Asylums Board a discussion arose as to whether the epidemic of small-pox was increasing or otherwise, the Chairman and others maintaining that there was a decided decrease in the number of persons attacked and in the virulence of the disease. This discussion is an admirable illustration of the way matters are mismanaged by gentlemen called "managers." This Board is responsible for providing adequate hospital accommodation, and has spent over half a million of money, and yet at this moment they are utterly at sea as to whether they have done enough, simply because they rely on the Poor-law Board for information which they should be able to obtain themselves. Dr. Bridges has certainly enough to do without being made the jackall of the managers; and the truth is, that he has not the means of ascertaining the state of the epidemic with either promptitude or certainty. We have been favoured with a copy of the last return to the 18th, and even that is incomplete. It is blind work to be spending enormous sums on new sites on the one hand, and on the other to be retarding the execution of contracts, without the least conception as to which course is right.

THE DISINFECTING APPARATUS IN ST. PANCRAS.

AN injunction has been obtained restraining the Vestry of St. Pancras from erecting a disinfecting chamber in Somers-town, on property of which Lord Somers is the ground landlord. We do not believe that there is the slightest danger or nuisance in such an erection, if proper precautions are observed; and there is a certain fitness in placing it in densely crowded localities, where it is most frequently required. Indeed, the real danger to the public is increased by placing the apparatus in a position which requires the infected clothes to be removed long distances through the streets. The objection is therefore due rather to local ignorance and prejudice than to an intelligent appreciation of a public need, and we regret that Lord Somers should have lent himself to give those prejudices a practical effect.

CROYDON AND SMALL-POX.

THE guardians have resolved to appoint one medical officer to take charge of all the small-pox cases in the parish of Croydon and in the Small-pox Hospital. This is to be the sole duty of the medical man. The object of this arrangement is to prevent the conveyance of the infection by the medical attendant. Probably this is a very rare occurrence, but if it ever happens it is more apt to occur in Poor-law practice than in private, owing to the want of room, of convenience for cleansing, &c. We approve of the plan of the Croydon Board, and imagine that their officers will only be too thankful to be relieved of a disagreeable duty. Dr. Carpenter has delivered a very able statement to the board in defence of vaccination, and in refutation of an article in the *City Press* against vaccination. He

said he did not believe there were more than three medical gentlemen who were not fully convinced of the truth of what he said, and "this small minority, these three, he should say, would be better in a lunatic asylum." We are quite of Dr. Carpenter's opinion.

MR. PAGET.

WE have great pleasure in being enabled to inform our readers that Mr. Paget is rapidly recovering, and may now, indeed, be pronounced convalescent. We sincerely hope that the convalescence may be speedy, and the restoration to health complete, and Mr. Paget's numerous friends in the profession will cordially subscribe to our good wishes. We omitted last week to state that Dr. Burrows, Sir Wm. Jenner, and Sir Thomas Watson have seen Mr. Paget, in consultation with Mr. Savory and Mr. Thomas Smith.

ORGANISATION OF MILITARY HOSPITALS.

WE perceive an announcement to the effect that Mr. D. Dalrymple will ask the Secretary for War to lay upon the table the Report of the Committee appointed by the War Office, in July last, over which Dr. Crawford, the head of the Medical Branch of the Army Medical Department, presided, with the several minutes thereon that have passed between the officials in Pall Mall. It is no secret that the report in question was long ago published as a confidential document; and we should be glad to ascertain, therefore, how much longer it is likely to retain this character.

PHYSICAL SCIENCE AT DURHAM.

WE are glad to find that the movement in favour of teaching physical science at the older Universities is extending to the minor seats of learning established on their model. Cambridge having recently followed the example of Oxford, is now, in her turn, imitated by Durham. At a meeting held on Saturday, the 25th ult., at Newcastle, under the presidency of Sir William Armstrong, it was resolved to found a physical science school in the young *alma mater* of the northern counties. There are to be four professorships, two maintained at the cost of the University, and two at that of local subscribers. In connexion with these there will be ten scholarships. The cost of maintenance will be £2000 a year, of which the University will defray one moiety for six years certain, and permanently should the school be successful. The town has already subscribed £3000 towards the other half. At the meeting, which was conducted in excellent spirit, the University was represented by the Dean of Durham.

THE EPIDEMICS OF LIVERPOOL.

THE deaths from small-pox in Liverpool, which for the three preceding weeks had been 89, 89, and 103, are for last week 97. Only a small proportion of deaths occur in the public hospitals under the management of the guardians. It is, however, hopeful to observe that the number of cases admitted to the workhouse has declined in successive weeks from 91, 92, to 57, 51. The mortality from fever during the same successive weeks has been 14, 20, 12, and 14. There is also a slight diminution in the number of fresh cases attended by the district medical officers, as well as of those admitted to the workhouse fever wards. If an illustration were wanting of the effect of special diseases on the general rate of mortality, Liverpool would undoubtedly supply the facts. It would indeed be interesting to know what the real effect of preventable disease has been on life and public economics in a town which has such an unhappy notoriety.

THE CLINICAL SOCIETY.

THE discussions at the meeting of this Society on the 24th ult. were of a usefully practical character. The paper read by Dr. Duffin on Roseola Variolosa was particularly *apropos* at the present time, when the early diagnosis of small-pox is eminently important. The surgical element was represented by Mr. Christopher Heath and Mr. Teevan, and the treatment of stricture, with its manifold varieties and difficulties, was freely and energetically discussed. Indeed, as Mr. Cooper Forster remarked, the differences in principle and practice between surgeons north and south of the Thames were very marked indeed. The next meeting of the Society will be held on the 14th of April.

THE DRAINAGE OF PORTSWOOD, SOUTHAMPTON.

MR. MORGAN, one of the Inspectors of the Local Government Act Office, has just opened an inquiry into the condition of the drainage and water-supply of Portswood. The district is at present suffering from scarlatina; and, as the whole of the drainage is carried into what are called dead wells, the water-supply is fearfully contaminated. Dr. De Chaumont, of Netley, had analysed a number of specimens, and reported that they were bad in every way for domestic purposes. The inquiry brought out a state of confusion which well indicates the necessity for early sanitary legislation. Four-fifths of the inhabitants were totally opposed to any system of drainage and water-supply. The district is under the local Board of Health, but the health committee had utterly ignored it, and had not collected rates within it. The Inspector arranged to visit the district, and advise as to the course which should be taken.

SMALL-POX IN PLYMOUTH.

CASES of small-pox have occurred in Plymouth, and as there were no means of isolation the guardians have taken a house for a short time until a temporary hospital can be erected near the Workhouse. The medical officer reported that he had examined all the inmates, and had found twenty-two persons who presented evidences of imperfect vaccination. Surprise was expressed that the Government had not issued any orders with regard to cases of small-pox found on vessels arriving in such ports as Plymouth.

HEALTH OF PARIS.

THE Registrar-General has again to report a break in the series of mortality returns from Paris, which, since the termination of the siege, had been forwarded regularly to this country. The annual death-rate during the seven weeks ending March 17th, was 87 per 1000 of the population. Should internecine war follow in the train of foreign conquest it may be that we shall have to record a mortality rate far greater than any which the unfortunate city has ever yet experienced.

IT was not to be expected that the Metropolis Water Bill would be allowed to pass the House of Commons unchallenged. Mr. Collins, M.P., is, on the motion for the second reading of the Bill, to move its rejection; while, if it gets safely through that stage, Mr. Harvey Lewis will move that it be referred to a Select Committee—i. e., shelved for this session.

AT Edinburgh, the Senatus Academicus met on Saturday last, and formally inducted Mr. Archibald Geikie into the Chair of Geology and Mineralogy recently founded in the University by Sir Roderick Murchison.

WE are sorry, but scarcely surprised, to hear that the Northumberland and Durham Medical Society have determined to discontinue the publication of their statistics of the prevalent sickness of the neighbourhood. The expense of publishing is inconvenient to the Society. We hope that the time is at hand when we shall have a public registration of disease. It is most urgently needed. When this is realised private labourers like Dr. Philipson may flatter themselves that they were the first to show the advantage and importance of such a system.

THE learned societies of Paris are just now busy on a very ungracious and deplorable labour. It has been proposed to strike off such German members as belong to the countries who have waged war against France. This is a mistaken and mischievous measure, and we are glad to see that in some societies, especially in the Surgical Society, opposition was offered to this uncalled-for exclusion. Science should stand aloof from political struggles.

THE first Annual Report of the Deputy Master of the Mint, just published, recites that, since August last, the works of the Mint have been brought under the operation of the Factory Acts; but no children under thirteen years of age are employed in the department, so that no change in the regulations has been necessary.

SOME cases of small-pox have occurred amongst the troops stationed at Malta, and have proved fatal in a few instances. One of the latter had been previously attacked with the disease. Small-pox had been prevailing to some extent among the civil population for some time, and cases of diphtheria have been not uncommon of late years.

THE Prime Minister stated in the House of Commons on Monday evening, in reply to Sir C. Adderley, that the recommendations of the Royal Sanitary Commission would be given effect to in the Local Government and Taxation Bills shortly to be laid before the House.

MR. FAWCETT, M.P., has given notice that when Mr. W. H. Smith brings on his motion relative to the Poor-law administration in the metropolis, he will propose to extend the inquiry to the whole of the United Kingdom.

PROFESSOR FLOWER, F.R.S., concluded his course of lectures at the College of Surgeons on Wednesday last. The lectures by Messrs. Birkett and Hulke will not be delivered before June.

ACCORDING to the latest information, small-pox is prevailing in China and Japan among the civil population, and to a slight extent among the troops.

MR. FRANCIS MASON, F.R.C.S., and Mr. Richard Davy, F.R.C.S., have been appointed surgeon and assistant-surgeon respectively to Westminster Hospital.

THE VACCINATION COMMITTEE.

THE case of the anti-vaccinationists having been closed, Mr. Simon's examination was commenced on Tuesday last. He began by adducing evidence as to the continued fatality of small-pox. It had been alleged that the mortality of small-pox had subsided in this country by reason of improved sanitary arrangements and improved methods of treatment; and the evidence derived from the Small-pox Hospitals having been impugned, though without reason, Mr. Simon quoted some remarkable statistics from Holland and India. At Rotterdam, with a population of 121,000, the deaths have recently risen to 116 in the week, a proportion which, if equalled in the metropolis, would represent more than 3000 deaths in the same time. At the Hague, with a population of 92,000, there had been a still higher mortality—viz., 121 deaths. This extraordinary mortality was not due to any difference in the sanitary conditions or any peculiarity of treatment, but to the presence of a large number of persons unprotected by vaccination, for it is the practice in Holland to defer the operation until the children are six or seven years old.

Dr. Harvey's Indian reports on small-pox contain remarkable evidence on the same point. Small-pox is never absent from Bengal. Every few years it breaks out into an epidemic, when it sweeps through the villages, attacking all persons who have not had the disease previously. In a given epidemic not more than 2·22 per cent. of the mortality occurs amongst persons who are over ten years of age, all above that age being protected either by having been inoculated or having had small-pox. On the examination of the natives confined in gaols, nearly everyone presented traces of having had the disease, and in one gaol 200 were all found pitted. In the last epidemic the mortality per 10,000 of the population was, in Agra (unprotected) 128·64; in Delhi, less unprotected, 104·0; in Burtpoor, partially protected by previous visitations and vaccination, 65·0; and in the British army in Bengal, fully protected, 3·59.

Mr. Simon then proceeded to point out the fallacies involved in the statements made as to the non-effect of a high mortality from small-pox on the general rate of mortality, which, he said, were utterly delusive. These fallacies were: First, the movements of population. The urban and country death-rate was, in round numbers, as 24·5 to 20·5, and it was evident that the general death-rate of the kingdom must be raised if there was any considerable movement of population from rural districts into towns, and as this movement had undoubtedly taken place to the extent of twelve per cent. between 1851 and 1860, no deduction could possibly be made as to the special effect of small-pox. The universal opinion of medical men was that the diminished mortality from small-pox, as compared with last century, was a substantial gain of human life. Another fallacy was the absence in the statements made to the committee of any reference to the altered proportion of young children. It was found, for example, that the birth-rate had risen from 32 per 1000 of the population of London in 1851, to 34·41 per 1000 in 1861; and the increased proportion of children being accompanied by a special high mortality would mask any diminished mortality from small-pox. Another fallacy was the mortality due to special conditions, geographical, industrial, &c. Thus the mortality of respiratory diseases varies enormously, and in certain towns the mortality of women from these causes was unusually high. So that it becomes impossible to state that any reliable evidence has been laid before the committee that a diminished death-rate from small-pox had not produced any effect upon the general death-rate.

Nor was there any reason whatever to suppose that other diseases had increased in proportion as small-pox had declined. Mr. Simon suggested that a certain analysis of the mortality in London should be prepared in the Registrar-General's office. Dr. Buchanan had made a provisional table, but it would be more satisfactory to have the information directly from the Statistical Department of the Government. But the facts appear to be as follows. Dividing the whole period from 1838 into three portions—viz., from 1838 to 1849, from 1850 to 1854, and from 1854 to 1869, the annual death-rate from all causes except small-pox was in No. 1, 25·023; No. 2, 23·952; and in the last period 23·591 per 1000. Thus there was a diminished annual rate of mortality from all diseases except small-pox of 1·5 per thousand. During the same periods the mortality from small-pox had been, from 1838 to 1849, 0·581; from 1850 to 1854, 0·300; from 1855 to 1869, 0·263; so that there had been a diminution of the death-rate from small-pox, probably due to compulsory vaccination, and also a diminution of the general death-rate.

MR. HADEN'S ETCHING.

WITHIN a door or two of the Royal College of Physicians in Pall Mall, at the gallery of Messrs. P. and D. Colnaghi and Co., there is now to be seen a work of art of the greatest interest to the medical profession. It is an etching by Mr. Seymour Haden, a surgeon in first-class practice, who employed his brief leisure last autumn in its production. The art of etching is not so generally understood but that a very brief description of it may be acceptable. The artist having coated a bright copper plate with a very thin layer of a composition which resists the action of acid, draws upon this with a steel needle, whose point, by removing the composition, displays the copper. This, no longer protected, is eaten away in more or less deep lines when the plate is subjected to the action of nitric acid in a bath of which it is subsequently immersed. The remaining composition being then removed, the bright copper plate is found covered with a drawing, the lines of which are excavated upon its surface. It is then handed to the printer, who fills these lines with ink, and passes the plate, covered by a sheet of paper, through a press. A proof is thus taken upon the paper. The result is an engraving, but of a particular kind. In place of the more or less regular and monotonous lines of an ordinary engraving, we find a drawing every line of which is exactly as the artist drew it. Every impression which is taken is as completely the offspring of his thought and imagination as is the music which delights our ears when a true musician touches the keys of a piano, and improvises melody. There is no middle-man in etching. The artist touches, and a facsimile of his work is reproduced hundreds of times over, so that hundreds can possess a drawing which is to all intents and purposes the drawing of the artist. This is one of the advantages of etching; but there are others which we have not space to describe. It is enough to say that the mode of work gives facilities for beauty of execution not to be found in any other process. This etching, as it is described by the author, is an open-air sketch on copper of H.M.S. *Agamemnon* "breaking up" opposite Greenwich. The day is declining, and the men have struck work for the night. Barges, balks of timber, lighters, and other Thames accessories occupy the foreground, and alongside the half-demolished hulk (which fills nearly the whole of the middle distance) is a powerful derrick prepared to lift out her remaining mast. Greenwich Hospital, Deptford Dockyard, and the *Dreadnought* lie off to the left, and a sailing barge passing under the bows of the condemned vessel suggests her comparative proportions. The plate is large for an etching, measuring 16¼ inches by 8 inches. It is printed by Mr. F. Goulding.

Of the genuine poetry in this drawing we cannot hope to convey any idea. The subject and its treatment appeal on the instant to our feelings. There lies the noble *Agamemnon*, with one mast alone standing, and that already doomed to be removed by the derrick at her side—the gallant ship which bore the flag of Admiral Sir Edmund (now Lord) Lyons during the siege of Sebastopol. It was this dismantled hulk which, sixteen years ago, her Commander ran under the guns of Fort Constantine, regardless of the disproportion between wooden walls and a stone-faced battery. This poor wreck appealing now to our regretful sympathies, with her broken bulwarks and mutilated spars, is the grand frigate which, amid deafening cheers, steered up the narrow defile of Balaklava harbour, and met the British troops just entering from Lord Raglan's ever-famous flank march. She is breaking up now, but still gallantly turns her helmeted prow to the sun as it goes down. Following the line of the hulk, we see the *Dreadnought* and Greenwich Hospital, both relics of the past. Decay and death—the irresistible changes which time brings about—are the pervading features of this poem-picture. It would be out of place in this journal to dwell upon the artistic details of this beautiful work, or we should like to direct attention to the dexterous way in which the artist leads up to the principal object in his picture by the line of barges stretching obliquely across it; to the truthful observation of nature which has made him pourtray the hulk, although it gets no direct rays from the sun, lighted up by reflection from the waves (true Thames waves) which tumble in the foreground.

There is one matter, however, to which we may legitimately refer. Mr. Haden has for some years occupied his few moments of leisure in the production of etchings which have placed him in the foremost rank of the followers of this branch of art; and we have before this, in commenting upon his previous works, referred to this subject. He is one of those who protest against the unwritten canon that professional men shall not be at liberty to utilise their leisure as they please,—that they shall be thought to be neglecting their duties if they cultivate æsthetic pursuits as a necessary recreation. We are pleased to aid him in the advocacy of this cause. It is intolerable that a medical man should not be able to rest his mind from his arduous vocation without a lurking suspicion on the part of the public that he is changing his profession, although a statesman may translate Homer or write novels without any such insinuation being brought against him.

Mr. Haden, it is unnecessary to say, is not a professional artist, and has not the slightest intention of becoming one, and we cordially wish him many years of success in the capacity in which he is well known and widely respected—that of a practising surgeon. Were it necessary to give any proof of our assertion, we might refer to the fact, which we happen to know, that he was offered by Messrs. Colnaghi the extraordinary sum of one thousand guineas for the copper plate of this etching, and that he refused it. He was unwilling to derive so serious an addition to his income from a pursuit which he preferred regarding, not as a source of large pecuniary gain, but as a legitimate recreation.

Let us repeat that the etching is to be seen at Messrs. Colnaghi's, the well-known publishers. Those of our readers who would like to obtain a proof should not delay, as we are quite sure that the limited number of impressions to be published will be rapidly sold out.

THE MEDICAL REGISTER.

THE Medical Register for 1871 is now before us, being the 13th volume of that work published by the Medical Council. It contains ten more pages than last year's.

The balance sheet published with this volume shows a more satisfactory state of things financially than the previous year's account. Although there have been two meetings of Council, the expense has only been £4060 11*s.* 9*d.*, against £4265 13*s.* 9*d.*, or £205 2*s.* 0*d.* less than the year 1869, when there was only one session or meeting of Council. The principal decrease of expenditure last year appears to be in the printing, which was £707, against £988 in the previous year; this latter amount included a large sum for printing State Medicine and Educational Reports, which appears to have been greatly reduced, and will now probably cease altogether.

From the General Summaries we find that the receipts in 1869 from fees and dividends amounted to £4404 16*s.* 7*d.*, and those in 1870 to £4941 17*s.* 10*d.*, being an increase of £537 1*s.* 3*d.* over the previous year. During the year 1870 it appears that 832 persons registered for the first time, whilst 363 persons added additional qualifications, making a total of 1195 registrations during that period, being an increase over the preceding year of 87 on the former, and 10 on the latter.

THE SMALL-POX EPIDEMIC.

PROGRESS OF THE EPIDEMIC IN LONDON.

WE fear that the hope of a very rapid decline of small-pox in London will not be realised. The number of fresh cases is still considerable, and in the southern districts of St. Saviour's, Newington, and Lambeth, there is a decided increase in the number of paupers attacked. There is, at present, ample room in the hospitals, particularly at Hampstead and Homerton; but, owing partly to defective organisation, and partly to an insufficient supply of ambu-

lances, there are considerable difficulties in utilising the beds to the utmost. We venture to suggest that arrangements ought to be made to prevent the transport of acute cases from Lambeth to Hampstead. The danger of a long journey is very great, and there must be patients at Stockwell who could be removed without the slightest risk.

The fatal cases of small-pox in London, which in the four preceding weeks had steadily declined from 227 to 213, 194, and 185, successively, rose again last week to 205. In eight permanent and temporary hospitals for this disease, 66 deaths were recorded last week. After distributing, so far as is practicable, these deaths in hospital among the districts from which the patients were admitted, it appears that 37 deaths from small-pox last week belonged to the West group of Districts, 49 to the North, 18 to the Central, 44 to the East, and 57 to the South. The fatal cases showed an increase last week in all the groups of districts, except the East, where the number had declined. The disease is still, however, most fatal in the East of London and in Westminster, although the fatal cases had increased last week in St. Pancras, Walworth, Bermondsey, Clapham, and Wandsworth.

SMALL-POX IN GLASGOW.

The arrangements of the medical officer of health enable him to give a daily return of the state of the epidemic of fever and small-pox. The number of small-pox cases at present under treatment is 125 in hospital, and 14 out, or a decrease of 6 upon the last report. There were 6 deaths last week, as against 5 the week previously. At the vaccination stations 2015 persons have had their arms carefully examined, and of them 310 were vaccinated—viz., 160 children and 150 adults.

Correspondence.

"Audi alteram partem."

MEDICAL REFORM.

To the Editor of THE LANCET.

SIR,—In the article on Medical Reform in the last number of THE LANCET (March 18th, p. 387), it is stated that the "Bill of the Association" has been the work of "the residue of the Reform Committee of the British Medical Association," and "that the so-called Reform Committee was a sort of excrescence from the Council, formed by persons who had no sort of right (on this question) to represent anybody but themselves, and who derived their only claim to collective consideration from the presence of five eminent men who seceded from them." This statement being altogether unfounded, and therefore calculated to mislead your readers, I have to request the publication of the facts.

1st. The Reform Committee of the British Medical Association is not "an excrescence from the Council," but was appointed by the general body of members at the annual meeting held in Newcastle in August last, in the same manner as the successive "Direct Representation Committee," extending from August, 1867, to August, 1870, had previously been appointed at the annual meetings held in Dublin, Oxford, and Leeds, each appointment being preceded by a public and free discussion.

The Medical Reform Committee consists of Dr. Charlton, Newcastle-on-Tyne, President of the Association; Mr. Whipple, Plymouth, President elect of the Association; Mr. Husband, York, President of the Council of the Association; Dr. Falconer, Bath, Honorary Treasurer of the Association; Dr. Chadwick, Leeds, ex-President of the Association; Dr. Sibson, London, ex-President of the Council; Mr. Heckstall Smith, St. Mary Cray, President of the Metropolitan Counties Branch; Dr. A. P. Stewart, London, Honorary Secretary of the Metropolitan Counties Branch; Mr. Michael, London, Barrister-at-Law, (a member of the Association); Mr. Southam, Manchester, ex-President of the Lancashire and Cheshire Branch; Dr. Davey, Northwoods, Bristol, ex-President of the Bath and Bristol Branch; Prof. Hughes Bennett, M.D., Edinburgh; The Rev. Prof. Haughton, M.D., Registrar of Trinity College, Dublin; Dr. Edward Waters, Chester, ex-President of the Association, and Chairman of Medical Reform Committee; and myself, as Secretary.

This committee was specially constituted so as to include representatives from Scotland and from Ireland, as well as from the North, South, East, and West of England, and no member has seceded from it. The term "residue," and the surpassingly elegant and expressive term of "rump committee" which you apply to the Reform Committee of the Association, are therefore inapplicable.

The whole of the Committee concurred in the statement on medical reform made to the Vice-president of the Privy Council. The "Bill of the Association," confided to the charge of Mr. Headlam, accorded strictly with the resolutions passed at the important and largely attended meetings held in Dublin, Oxford, Leeds, and Newcastle, as also at the special general meeting called in London last year to consider the proposed Medical Bill of the Government. The Reform Committee had no power to depart from the principles so repeatedly affirmed.

I am authorised to state that Mr. Headlam withdrew the Bill of the Association because he believed that rival measures would bring discredit on the profession; though, as far as Mr. Headlam's great parliamentary experience and judgment are of value, he is also of opinion, with Mr. Forster, that THE LANCET Bill can never become law.

2nd. The statement that the Reform Committee "derived their only claim to collective consideration from the presence of the five eminent men who seceded from them" is also incorrect, inasmuch as they were never on it. They were all members of the General Medical Council, and retired from the executive of the Association because they were opposed to the direct representation of the profession, and to the consequent diminution of the influence of the universities and the corporations in the General Medical Council, which it is your object to effect.

I am, Sir, your obedient servant,

WATKIN WILLIAMS, F.R.C.S.,
General Secretary of the British Medical Association.

13, Newhall-street, Birmingham, March 22nd, 1870.

*** We think it would be of some interest to the profession to learn by whom the members of the above-named Reform Committee were proposed; what notice was given to the Association of the names about to be proposed; how many members of the Association were present at the meeting at which the Committee was elected; how many meetings the Committee has held; and how many meetings each individual member has attended. We cannot promise to find space for these particulars; but they are not the less deserving of publicity.—ED. L.

PROMOTION IN THE MEDICAL DEPARTMENT OF THE ARMY.

To the Editor of THE LANCET.

SIR,—Clearly as your correspondent "M.D." states his views from his own standpoint, it may be safely affirmed that they will not be endorsed by one in twenty of the rank and file of the department. Only a few of the many points he raises can be discussed in a short letter.

In opposition to yourself, and the vast majority interested, he apparently holds that the now formidable host of old assistant-surgeons have little cause for despondency over their prospects of promotion, inasmuch as, holding the rank of captain, and having a quinquennial increase of pay up to fifteen years' service, they ought to be satisfied. But will they then get promotion? He will brighten their prospects at once if he can only give good grounds of hope for what he merely assumes, that after fifteen years they will all have the "excellent position of a major, and £1 a day."

The rank of captain after six years' service was certainly given originally, not as compensation for indefinite delay in promotion to the status of surgeon, but simply because it was a necessary step in the ladder by which a surgeon was to reach the rank of a field officer. Nor is it at all an equivalent for promotion, being only important relative to matters outside the department, such as choice of quarters, &c. Within the department the holders of it are not the less

bond-fide subalterns—not the less unavoidably dwarfed by subordinate functions.

Moreover, it cannot be admitted, as your correspondent avers, that the term *assistant* is "useless" and "unmeaning," however socially objectionable it may be, for it is but as the shadow to the substance, and fairly indicates what it directly implies. The truth is, that practically there are but three ranks in the department—viz., inspectors, surgeons, and assistant-surgeons. No readjustment of titles, no substitution of new designations, can, in the nature of things, materially alter the relative position of these grades, nor their working order, even if that were desirable. Nothing but a steady flow of promotion can balance them, and the solution of this problem lies chiefly in the framing of judicious rules of retirement, through which army surgeons can, as they ought to be, employed in the militia and reserve forces; indeed, so apparent is this, that the speedy promulgation of a scheme having such an object in view is not less confidently than eagerly anticipated by all army medical officers.

I am, Sir, your obedient servant,

March 27th, 1871. ANOTHER M.D.

MR. PAGET'S HEALTH.

To the Editor of THE LANCET.

SIR,—In the report on Mr. Paget's health last week it is made to appear that I (being the only physician named as attending with the surgeons) am responsible for the medical treatment of this important case. I shall be much obliged if you will do me the favour of correcting this.

Dr. Burrows and Sir William Jenner, and also at one stage Sir Thomas Watson, have directed the medical treatment. My visits to Mr. Paget have been as a friend, and I have only incidentally taken any part in prescribing. This may seem but a trifling matter to correct in your columns, but in justice to the distinguished physicians named, I should be glad if the correction were made.

I am, Sir, your obedient servant,

WILLIAM GULL.

Brook-street, Grosvenor-square, March 29th, 1871.

THE LANCET MEDICAL BILL.

To the Editor of THE LANCET.

SIR,—You have invited discussion with regard to your "Medical Act Amendment Bill." I have carefully read it, and as a country practitioner *I can find no fault with it.* I sympathise to a great extent with your talented correspondent from Sheffield (Dr. Balbirnie).

I am, Sir, your obedient servant,

Castle Douglas, March 25th, 1871. S. C. WRIGHT, M.B. Edin.

IRELAND.

(FROM OUR SPECIAL CORRESPONDENT.)

HEATH OF DUBLIN.

FROM a report of the medical officer of health for the month ending March 18th, I learn that the mortality was moderate, the Registrar-General having recorded 607 deaths, against 738 in the preceding month; the rate was therefore 1 in 419. Zymotic diseases caused 96 deaths, including 26 by fever; but during the week ending March 4th, no death from it was recorded, a circumstance unprecedented. During the month 94 cases of fever were admitted into the Hardwicke and Cork-street Hospitals. By small-pox 1 death is recorded, that of a woman conveyed from London with the disease upon her; 4 other cases were reported during the month. In 1 the infection was conveyed on clothes from Liverpool, and in 2 others the patients were brought by steamer from that port; but information having been obtained of the intended arrivals, the sanitary sergeants attended and had the sufferers conveyed to hospital. Scarlatina caused 18 deaths; whooping-cough, 24; consumption, 74; and bronchitis, 117. The cold, harsh winds, and low temperature of the past month made these diseases unusually fatal.

SANITARY CONDITION OF DROGHEDA.

The sanitary condition of this town was brought under the notice of its corporation last week by a letter from his Excellency Earl Spencer, enclosing a report, the result of a personal inspection by Dr. O'Brien, the Government Inspector, in which the defective sewerage was referred to; to which the inspector, in conjunction with the local medical authorities, traces the existence of typhoid fever of a deadly type, which it seems is never absent from the town for any lengthened period. The nuisance inspector was characterised as existing only in name, and the neglect of cleanliness was most reprehensible. At the close of the meeting the resignation of the surveyor and inspector of nuisances was handed in and accepted. It is to be hoped that this communication from the Lord-Lieutenant will have the effect of stirring up the authorities in Drogheda to a proper sense of their duty.

Dublin, March 28th, 1871.

Obituary.

PROFESSOR PIETRO LAZZATI,

OF MILAN.

THE medical world of Italy mourns the loss of one of its brightest ornaments. Pietro Lazzati died of apoplexy on the 22nd of March. He had been engaged in his duty as Director of the Milan Lying-in Hospital, displaying all his usual energy, only three days before his death. He was a pupil of Lovati, whom he was accustomed to style the head of the Italian School of Obstetrics. The master would, no doubt, acknowledge with pride that his pupil was no unworthy rival. Lazzati had worked with the greatest energy and success. His practice has been faithfully illustrated and recorded in the annual reports of the great institution over which he presided, by his friend and assistant, Dr. Gaetano Casati. He himself published many monographs, amongst which the most remarkable is one on the Mechanism of Labour by the Shoulder. For accuracy of observation, clearness of description, sagacity and judgment in deduction, this memoir has rarely been surpassed. It is a picture from life drawn by the hand of a master. He was held in the highest esteem in Italy for his patriotism. He had served as a soldier in the cause of national independence in the corps of Lombard Volunteers of 1848, and the company to which he belonged followed him to the grave. The Italian papers describe him as a loyal friend, a man of heart, free alike from weakness and fanaticism, born to do good, and ever doing it without talking of philanthropy. Those who knew him best will most readily bear witness to the strict justice of this praise. He was a man of excellent presence, of frank and manly bearing. His decease in the meridian of his age is a heavy blow to science and humanity. There is a good photographic likeness of him in the library of the Obstetrical Society, of which body he was an honorary Foreign Fellow.

PATRICK ANDERSON, L.R.C.S. ED.

ON Monday, March 13th, this gentleman died suddenly at his residence in Castle Douglas. For fifty-three years he had been in extensive practice there. During that time he gained the confidence of everyone with whom he came in contact. His memory will be cherished and revered by young and old, rich and poor. In the latter years of his life he may be said to have practised the science of medicine from the simple wish to do good, and for the love he himself had to his profession. By his younger professional brethren he was looked up to with that respect which age should inspire, and with that reverence which advanced knowledge can command. At seventy-two years of age his spirit gently resigned its bonds, and returned to that Presence who tells us the "Labourer is worthy of his hire." All places of business were closed at the hour of the funeral, and a universal feeling prevailed that a good and true man had passed away for ever.

IMPORTANT PROSECUTION.

A PERSON styling himself "Du Brange, Graduate of Giessen University, and a Member of the Royal College of Surgeons, England," and whose address is given as of 36, Gilbert-street, Oxford-street, appeared at Marlborough-street Police-court, on Thursday last, on a summons issued at the instance of the Royal College of Surgeons, charging him with falsely representing himself to be a member of the said College. Mr. Straight appeared for the prosecution, and Mr. Ring (solicitor) for the defendant. Sergeant John Meiklejohn, of the Detective Department, Scotland-yard, proved having kept watch for some time past on the defendant's proceedings, and that he had seen him at his own shop dispensing medicines, for which he received money. The full penalty of £20 was inflicted, the magistrate (Mr. Knox) expressing his satisfaction at the conviction; and, in answer to an application of the defendant's solicitor for a mitigation of the penalty, refused to entertain the idea for a moment. We congratulate the profession on this most welcome indication that the College of Surgeons has at last awoke to a sense of its duty.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on March 23rd:—

Ayles, Thomas Vaughan, Southsea, Hants.
Doran, Alban Henry Griffiths, Lansdown-road, Notting-hill.
Hazel, William Francis, Seymour-street, N.W.
Lycett, John Allen, Scarborough, Yorkshire.
Noakes, Samuel Silverthorne, Newhaven, Sussex.
Rose, William, High Wycombe.

The following gentlemen also on the same day passed their first professional examination:—

William Edward Fulford, London Hospital; Clement F. F. Murrell, St. Bartholomew's Hospital; Samuel Wm. Moore, St. Thomas's Hospital.

THE annual meeting of Convocation in the University of London will be held in the University building in Burlington-gardens, on Tuesday, May 9th, next.

THE marriage of H.R.H. the Princess Louise was celebrated at Ventnor by the opening, for women patients, of the second pair of houses of the National Hospital for Consumption.

A PUBLIC ADDRESS was presented to Mr. R. A. Lithgow, late assistant to Dr. W. H. Cooke, of Aldridge, Staffordshire, on March 24th; and on the same occasion a beautiful copy of the Bible was presented by the members of the Wesleyan Connexion in the neighbourhood.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—On Friday evening, March 24th, Dr. Carr, of Blackheath, read a paper on Vaccination and Revaccination. Mr. Charles C. Mitchinson, M.R.C.S., of St. Germain's-terrace, Lee, being proposed by Dr. Carr, and seconded by Dr. Purvis, was unanimously elected a member.

CONCERT AT GUY'S HOSPITAL.—On Wednesday and Thursday evenings some of the students at Guy's Hospital gave a concert in the Governors' Court-room, under the patronage of the President and Treasurer, both of whom honoured the performance with their presence. The proceeds of the concert were given to the Samaritan Fund. Messrs Buchanan (leader), Carter, Clarke, Eager, Mallam, Nash, Peacock, Rees, Smith, Stephens, Ticehurst, Tipple, and Tiennerry contributed their services to the entertainment. Several part songs were given with good effect; indeed, the manner in which they were all sung reflected the greatest credit on the singers, and would bear comparison with some of the best amateur musical societies. The instrumental formed but a small portion of the entertainment, and, in our opinion, would better have been omitted, though, perhaps, it served to relieve the monotony of a continuous hum of male voices. The concert altogether was a great success, and did infinite credit to the good taste of those engaged in the arrangement of the performance.

Medical Appointments.

BENNETT, F. W., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Warblington District of the Havant Union.

BUCKLEY, S., M.R.C.S.E., has been appointed Resident Physician's Assistant at the Royal Infirmary, Manchester, vice J. P. Sleightholme, L.R.C.P.L., M.R.C.S.E., appointed House-Surgeon to the North Ormesby Infirmary, Middlesborough.

CANT, M. E., L.R.C.P.L., M.R.C.S.E., House-Surgeon at the Royal Westminster Ophthalmic Hospital, has been appointed Medical Officer to the St. Pancras School at Leavesden, vice C. L. Parr, L.R.C.P.Ed., M.R.C.S.E., resigned.

CARR, S. T., L.R.C.P.Ed., M.R.C.S.E., has been appointed Resident Medical Officer of the Notting-hill and Shepherd's-bush Dispensary.

COWEN, P., M.R.C.S.E., has been appointed Assistant Resident Medical Officer at the Islington Parish Workhouse.

DARWEN, J., M.R.C.S.E., has been appointed (permanently) Medical Officer for District No. 5 of the Parish of Birmingham.

DEANE, J., M.D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Somersham District of the St. Ives Union, Hunts, vice J. T. Leigh, L.R.C.S.Ed., resigned.

FRIPP, H. E., M.D., M.R.C.P.L., has been appointed Consulting Physician to the Bristol Hospital for Sick Children, vice J. A. Symonds, M.D., deceased.

GRACE, E. M., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Almondsbury District of the Thornbury Union, Gloucestershire.

GREEN, C. J., M.R.C.S.E., has been appointed House-Surgeon to the County Hospital, Huntingdon, vice J. B. Wilson, resigned.

JACKSON, J. B., L.F.P. & S. Glas., has been appointed (permanently) Medical Officer for District No. 2 of the Parish of Birmingham.

JONES, Dr. H., has been appointed a Medical Officer to the Notting-hill and Shepherd's-bush Dispensary.

JONES, J. F., M.R.C.S.E., has been appointed (permanently) Medical Officer for District No. 4 of the Parish of Birmingham.

KIDGE, A. A., M.R.C.S.E., has been appointed Resident Medical Officer to the Infirmary, Newport, Monmouthshire, vice R. Petch, M.R.C.S.E., resigned.

KILBRIDE, Dr. J., has been appointed Resident Medical Officer to Visit Home Patients of the Infirmary and Dispensary, Bradford, Yorkshire, vice J. S. Cameron, M.D.

SUCKLING, C. B., M.D., has been appointed (permanently) Medical Officer for District No. 3 of the Parish of Birmingham.

SUFFIELD, C. R., L.R.C.P.L., M.R.C.S.E., has been appointed (permanently) Medical Officer for District No. 1 of the Parish of Birmingham.

WILLIAMS, C. T., M.D., M.R.C.P.L., has been appointed a Physician to the Hospital for Consumption and Diseases of the Chest, Brompton, vice J. Burden-Sanderson, M.D., F.R.C.P.L., F.R.S., resigned.

WOOLCOTT, J., F.R.C.S.E., has been elected a Consulting Surgeon to the Kent County Ophthalmic Hospital, Maidstone, vice Henry Hancock, F.R.C.S.E., resigned.

Births, Marriages, and Deaths.

BIRTHS.

APPLEYARD.—On the 20th of October last, at Longford, Tasmania, the wife of James Appleyard, J.P., M.R.C.S.E., L.S.A., of a son.

CHEADLE.—On the 24th ult., at Hyde-park-place, Cumberland-gate, the wife of W. B. Cheadle, M.D., of a son.

GRAY.—On the 22nd ult., at Rugeley, the wife of F. J. Gray, L.S.A., of a daughter.

LEALE.—On the 17th ult., at Bridge-terrace, St. Sampson's, Guernsey, the wife of Josiah Leale, M.R.C.S., of a daughter.

SHAW.—On the 26th of Feb., at Thornhill, Dumfriesshire, the wife of Robt. Shaw, M.B., C.M., of a son.

VERITY.—On the 20th ult., at Garndiffaith, near Pontypool, the wife of A. Robt. Verity, M.R.C.S.E., of a daughter.

WYLLYS.—On the 28th ult., at Great Yarmouth, the wife of Wm. E. Wyllys, L.R.C.P.Ed., L.S.C.S.Ed., of a son.

MARRIAGES.

COOKE—HAMEL DE MANIN.—On the 22nd ult., at the French Protestant Church of Edward the Sixth, St. Martin's-le-Grand, Thomas Cooke, M.D., M.R.C.S.E., &c., only son of John Hawley Cooke, Esq., of Shrewsbury, to La Comtesse Aglaé Hélène Edmé de Hamel de Manin, daughter of the late Jean François Comte de Hamel de Manin.

JACKSON—DAMAIN.—On the 15th of Feb. (by special licence), in St. George's Cathedral, Cape Town, A. C. Jackson, M.R.C.S., L.M., L.R.C.P., second son of A. Jackson, Esq., of this City, to Adrienne Damain, youngest daughter of the late F. Damain, Esq., of Mauritius.—No Cards.

DEATHS.

COLTHURST.—On the 17th ult., at Tyr Phil, Glamorganshire, Isabella Sarah, wife of James Baxter Colthurst, M.R.C.S., aged 39.

DAVENPORT.—On the 22nd ult., at Odd Rode, Cheshire, Charles Davenport, L.R.C.P.L. (for 32 years one of the Medical Officers of the Wolstanton and Burslem Union), aged 79.

HENDERSON.—On the 19th ult., at St. Heliers, Jersey, J. Henderson, M.D., Inspector-General of Hospitals.

HOLME.—On the 19th ult., James Johns Holme, M.R.C.S.E., L.M., L.R.C.P., second son of A. Jackson, Esq., of this City, to Adrienne Damain, youngest daughter of the late F. Damain, Esq., of Mauritius.—No Cards.

LARCOMBE.—On the 20th ult., John Larcombe, M.R.C.S.E., of Lanyport, aged 55.

MOYLAN.—On the 1st of Feb., at Kabenda, West Coast of Africa, M. F. Moylan, L.K.Q.C.P.I., L.R.C.S.I., Assistant-Surgeon H.M.'s Ship "Pert," aged 25.

TWEMLOW.—On the 13th ult., Alfred Twemlow, M.R.C.S.E., of Sandbach, Cheshire, aged 49.

WATKINS.—On the 21st ult., at Mornington-road, N.W., Joshua Watkins, M.R.C.S.E., aged 76.

Notes, Short Comments, and Answers to Correspondents.

BURIAL-PLACES FOR LARGE TOWNS.

At the last meeting of the Glasgow Philosophical Society, Dr. Gairdner, after reading a communication from Mr. C. H. Wilson on the "Cemetery of Staglieno," near Genoa, offered some remarks upon the duty of large municipalities to take burial arrangements out of the hands of private enterprise, and deal with them in a large and liberal spirit, not only as a matter of taste and æsthetics, but also of decency and public health. Dr. Gairdner dwelt upon the increased cost of burials to the poor, now that intramural interment was done away with, and he held that the municipality should liberally assist in the removal of the dead. For the benefit of the public, burial-grounds had been removed out of town, and therefore in his judgment the public should prevent the change from becoming pecuniarily oppressive upon the individual poor man. Beyond doubt this is a subject worthy of serious consideration, and Dr. Gairdner has done well in calling attention to it.

Prof. Parker's second Croonian lecture will appear next week.

THE ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—Whilst agreeing in many of the statements put forward by your correspondent of the 25th instant, I do not agree with the writer that the title of assistant-surgeon is at the bottom of the supposed grievance in the matter of promotion in the army medical department. In all services, civil and military, there are distinctions of rank, and it is only by working for them that we appreciate their value. If we were all made "Fellows" of our respective Colleges on entering the profession, the Fellowship would be thought nothing of. If you make all your officers "generals," who are to be the lieutenants, captains, majors, colonels? The rank of surgeon is a distinct one, which the present holders value from having worked during long periods of service to obtain; and if for the benefit of the department, or to allay a sentimental grievance, or more likely to get rid of the cry about promotion, you do away with that designation, you should in fairness give to the present surgeons one distinctive of their present rank—one by which the young officer may be distinguished from the older and more experienced, and one to which the former might look forward within a reasonable time as a reward either for distinguished service or promotion; otherwise men lose their zeal, not having any motive to exert themselves. For this purpose no more appropriate title can be than that of surgeon-major, one which should distinguish all ranking as field officers, instead of, as now, only those ranking as lieutenant-colonels. I believe this change would be very popular. You would then have two distinctive grades in the executive as well as the administrative branches of the service—the surgeons-major taking, as they do now, the more important charges; the surgeons the ones more junior and suitable to their years.

With regard to promotion, there are many ways by which it may be accelerated without shelving the senior members of the profession *solus cum solus*. Duly proportion the higher ranks to the junior. Give to the former all militia appointments as they become vacant, if they wish to retire, thereby gradually forming a trained medical reserve, available for calling into active service at home, when at any time the officers in the regular establishment are required for war or other temporary emergencies, instead of crushing into the army a number of medical candidates, who become supernumeraries, and on arriving at the top of their rank clog all promotion owing to their number. Again, open up civil appointments to army medical officers. Who can be more fitted for sanitary duties or for establishments where a certain amount of routine and discipline is required?

If you wish to limit appointments to fixed periods, limit medical staff appointments and those of the assistant-professors at the school, and circulate such specially trained officers as an example to others. Further, reform the department by gradually improving the competitive examinations, so that candidates who are only medically well educated must show that they know as well something of the language and literature of their own country; and give credit by increased number of marks to those who have learned what is as necessary as mere professional knowledge, and without which it can scarcely be applied. In fact, proceed further in the direction in which the Director-General has very properly by tentative measures attempted to pursue. You will then in time have a department contented, its members highly educated, and its appointments eagerly sought for, even if only to show that one had risen a cut above a class of "doctors" who inundate the land. Our service will then rank first amongst those of European services, and not require foreign patterns for a model.

Faithfully yours,

March, 1871. A REGIMENTAL SURGEON.

Mr. W. H. Borham.—One medical man should never disparagingly criticise the evidence of another upon a mere newspaper report, which may contain errors likely to be mere printer's errors.

PRURIENS VULVÆ.

To the Editor of THE LANCET.

SIR,—A very troublesome case of pruriens vulvæ induces me to ask if it is always to be intractable to remedies? The case I allude to is that of a lady, aged forty-four, who for years past has daily taken a bath, and at night used a syringe, for the sake of cleanliness. She lives abstemiously, suffering from a fibrous tumour of the uterus. She never walks or undergoes fatigue. Among the remedies she has used are the following:—Bismuth, sulphur, morphia, chloroform, acetic acid, cold cream, nitrate of mercury ointment, linseed-tea with soda, lime-water, with internal administration of alkalies and tonics. I should be glad of a suggestion from some of your correspondents.

Your obedient servant,

March, 1871. CHIRURGICUS.

LABOURERS' COTTAGES.

MR. W. H. GREGORY, M.P., sought last week to commit the House of Commons to a resolution in favour of making provision for improving the condition of labourers' dwellings in Ireland. He was unsuccessful, as in an assemblage largely composed of landlords was pretty certain to be the case. Nevertheless, he adduced some illustrations of the need of such improvement that may with advantage be pondered by landlords, English as well as Irish. Thus in one locality the Court of Chancery was the landlord of fourteen houses; and upon application for certain improvements necessary for the health of the inhabitants, the Receiver of the Court declined to accede, on the ground that "it was not his duty to exercise feelings of humanity at the expense of the estate." In these houses, says Mr. Gregory, "there were 36 cases of fever and 11 deaths;" they were in "a most wretched state, and rain fell on the beds of the fever patients." We echo Mr. Gregory's wish that the aforesaid Receiver might be required to spend a rainy night in one of these miserable cabins; the relative estimation in which this official regarded "feelings of humanity" and the "expense of the estate" would probably be found in the morning to have undergone considerable change. It is simply the fact that such evils produce not only epidemics of physical disease, but of crime also, and it is the most shortsighted policy in the world to ignore this truth. So long as our labouring population are lodged like brutes (or worse than brutes in too many instances), it is as idle to talk of moral progress as of preventing the growth and spread of disease among them.

An Applicant (Sunderland) had better address himself to the Colonial Office.

ATTENDANTS IN LUNATIC ASYLUMS.

To the Editor of THE LANCET.

SIR,—I have read Dr. Howden's valuable suggestion in THE LANCET of Feb. 25th relative to the attendants in lunatic asylums, and am satisfied that it only requires to be extensively known to meet with universal approval and adoption. In domestic life, when we have good servants, we all know with how much regret they tell us, "I want a change," for no satisfactory cause, often making the change for the worse. Time was, at least in Scotland, when servants remained for many years—aye, often for a lifetime—in the same family. In illustration, let me recall an incident which occurred, I think, to the late Sir Adam Ferguson, whose butler had been with him during very many years. During that time they had occasional quarrels; but after a rather sharp brawl, Sir Adam told him, "This will never do; you and I must part." "Dear me," replied the butler, "whaur are ye gawn, Sir Adam?" The butler had no intention of leaving.

I know few things more annoying and discouraging to the medical superintendent in charge of an asylum than frequent changes of attendants, or more distressing to the weak-minded patients. If such a scheme as Dr. Howden suggests were adopted by all asylums I am quite satisfied that it would not only work well, but be most beneficial; and the prospect of a retiring annuity would induce many an attendant to remain, and the "wish a change" would seldom be heard. Of course such a plan should only be applicable in cases of trustworthy attendants, and no doubt it might have the effect of rendering indifferent attendants more useful. I would suggest that Dr. Howden should send a circular, stating in full his suggestions, to the superintendent or physician of every licensed asylum. This might be the most likely means of forming such a "Friendly Society" as he suggests, and soliciting further information or suggestions, and also to consider if 10s. annually for each attendant is not too small a sum. Indeed the annual subscription should be such a sum as to allow the Society to have always a surplus on hand to enable them to meet any unlooked for contingency.

Yours obediently,

Edinburgh, March, 1871. J. C.

Dr. F. E. Carey.—The child seems to have died from erysipelas or some similar condition. The vesicles were too much interfered with, and too often, and the circumstances were of a very unhealthy character. The idea of a syphilitic taint in the matter used seems entirely unsupported and unreasonable.

L. M. D.—Kesteven's Domestic Medicine, or a System of Domestic Medicine which is appearing in "Cassell's Household Guide."

A CORRECTION.

To the Editor of THE LANCET.

SIR,—As Mr. Brabazon Pilkington (the history of whose case you must now be familiar with) has written to the *Standard* of the 9th December last, inviting attention "to the fact that the medical evidence called in support of the prosecution (in his case) consisted of the principal colonial medical officer, Dr. Charsley, and two of his assistants, whose qualifications would hardly entitle their opinion to any weight in an English court of justice, they having been perfunctorily educated in Ceylon," permit me to state that Dr. Charsley, the respected head of the Colonial Medical Department, is an Englishman by birth, and was educated at St. George's Hospital. He is a member of the Royal College of Surgeons of England, and M.D. of St. Andrews. His present rank is principal Civil Medical Officer and Inspector-General of Hospitals, Ceylon. The two assistants alluded to are Dr. Gregory Vandort and myself. We commenced our professional studies in the University of Calcutta, and completed them in Europe. Dr. Vandort graduated with "academic honours" at the University of Aberdeen, obtaining the degrees of M.D. and C.M. He is an Assistant Colonial Surgeon of the 1st Class, Superintendent of the Lunatic Asylum in Colombo, and Professor of Anatomy in the Medical School. I am a licentiate of the Royal College of Surgeons of Edinburgh, and a licentiate in Midwifery of the same institution; licentiate of the Society of Apothecaries, London; and obtained a "certificate of honour" with the degree of M.D. at St. Andrews. I completed my studies at St. George's Hospital, London. My present rank is that of Assistant Colonial Surgeon of the 1st Class, and my name is registered in London as "Medical Officer of the Royal Insurance Company."

Yours faithfully,

J. L. VANDERSTRAATEN, M.D.

Point de Galle, Ceylon, Jan. 25th, 1871.

SEWAGE IRRIGATION AT AYLESBURY.

It is greatly to be regretted that personalities should be indulged in at local Boards, and that imputations of improper motives should so often be put in the place of argument. For some time past the question of sewage irrigation has been discussed at Aylesbury, and the Local Board consulted those eminent drainage engineers, Mr. Baldwin Latham and Mr. Baily Denton. The report of the latter has aroused the fears of certain ratepayers and landowners, and the question as to how the sewage is to be dealt with has been discussed with an acrimony which makes it all but impossible for the ratepayers to ascertain the truth. We are glad to see that the *Aylesbury News* is protesting against this unhappy state of things, and claiming for the subject a calmer consideration. There can be no doubt that measures must be taken to get rid of the sewage, and that expense must be incurred; and it is satisfactory to observe that some new and independent members have been appointed to the Board of Health, who may be expected to moderate the rancour which has hitherto prevailed.

C. C.—The letter was evidently written with a good intention. Our correspondent is very severe in his judgment.

Mr. Charles B. Hay's communication shall receive attention.

LACTIC ACID AND LACTATES.

To the Editor of THE LANCET.

SIR,—By way of supplement to your answers to "Clinical Clerk, Wandsworth," allow me to state that all the information which he may require is contained in a pamphlet published at Lyons, and the English translation can most probably be obtained on application to Messrs. Newbery and Sons, St. Paul's-churchyard, London. Dr. Pétrequin is the author, and it is accompanied by some remarks of M. Burin du Buisson. In the meantime, by referring to "Waring's Therapeutics," second edition, p. 446, he will obtain valuable information. Care must be taken that the acid employed is pure; it should be colourless, and of syrupy consistence. The dose of the acid is from fifteen to thirty minims. Syrup of ginger or orange-peel may be added to each dose. The pure acid is very soluble in water, and all its salts are soluble in the same vehicle. Lactate of iron has been studied by MM. Gélis and Conté; but, as I presume it is the alkaline lactates that "Clinical Clerk" wishes to try, I append M. Burin's formula for lozenges of lactate of soda and magnesia, which are used in the treatment of dyspepsia. Take of lactate of soda and magnesia, four parts; pulverised sugar, sixty parts; gum adraganth, sufficient quantity: to be made into lozenges of sixteen grains each. The dose of the lactate in each is about four-fifths of a grain; or the lactate may be given with sugar alone in doses of three to six grains before or after meals. Lactate of soda and magnesia is soluble in thirty times its weight of water. Four preparations are prepared by M. Burin—viz., digestive lozenges and powders of the lactate of soda and magnesia, and digestive lozenges with pepsine. I think Messrs. Newbery have all the lactate preparations.

Yours truly,

Northallerton, March 20th, 1871. H. B.

Mr. J. Wardlesworth.—We cannot congratulate either party in this correspondence on being perfectly faultless. We shall for convenience designate the respective parties as W. and B. We think that W. has a just cause of complaint against B., in that B. took charge of a case that had been attended by W., without giving him or instructing the friends to send him specific intimation. This is the duty of every medical man who supersedes another, whether he be a factory surgeon or a private practitioner. B. says, indeed, that he understood that W.'s attendance had ceased, and that he was only called in for the emergency. There would only have been the more grace in doing what was courteous. W. erred in two ways, we think. He visited B.'s patient as the Poor-law medical officer independently of the rule which regulates men in private practice—giving notice to the practitioner in actual attendance. Not only so; he seems to have given a therapeutical opinion at variance with that of B. Nothing can justify this but previous courtesy and consultation, and the unseemly difference paraded before the guardians and the public is a professional scandal. Moreover, W.'s letter of the 26th of January is too excited. There are too many strong expressions and charges in it. Medical men, especially if they set out with the advantage of being aggrieved, should write with serenity. We hope that these suggestions may help W. and B. to a friendly termination of a dispute that should never have happened.

EPSOM COLLEGE.

To the Editor of THE LANCET.

SIR,—I wish to call your attention to the great injustice that is often done to applicants for Foundation Scholarships at the Epsom College. As matters now stand, it is not the most deserving applicant that is always admitted, but he that has most friends and money wherewith to pay the inevitable expense of a canvass. The way this is carried on is well worthy of remark. In the first place you get a card or letter, containing the names of a great many eminent men, whom you may or may not know or care about, and a request that you will vote for A. B., aged nine or ten years, at the next election, which in your innocence you promise to do; and when the voting-paper comes you find, to your horror, that C. D. is fourteen years old, and this is his last chance of election, and then you regret your hasty promise when it is too late. Now this, I think, is not just, and might soon be altered by passing a bye-law that any applicant canvassed for will in future be rejected, and then the subscribers would vote without bias.

Another point seems worthy of note, and that is, how few of the fathers of applicants have been subscribers themselves. In looking over the list for 1870, I find that only ten out of forty-three had done so. It is impossible that the sum of a guinea could not have been saved annually by these gentlemen, and presented to the College which has now to provide for their sons. I think this will induce many who do not now subscribe to do so at once.

Yours truly,

Woolton, near Liverpool, March, 1871. J. FLETCHER LITTLE.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

To the Editor of THE LANCET.

SIR,—I am directed by the Council to forward you the enclosed copy of a resolution and form of petition to the House of Commons, which has been adopted at a meeting held here this evening, and request the favour of your publishing the same in the next issue of THE LANCET.

I am, Sir, yours obediently,

Medical Club, Spring-gardens, March 28th, 1871. JOS. ROGERS.

"That this Council, having learnt that Lord O'Hagan (Lord Chancellor for Ireland) has introduced in the House of Lords a Lunacy Regulation (Ireland) Bill, consider the present moment as opportune for calling the attention of the Legislature to the disabilities under which the dispensary medical officers of Ireland labour in reference to the examination and certification of lunatics. They, therefore, resolve that a petition, of which the following is a copy, shall be drawn up, signed by the President, on behalf of the Council, and forwarded to Dr. Lyon Playfair, M.P., for presentation to the House of Commons."

To the Honourable the Commons of Great Britain and Ireland in Parliament assembled.

The humble petition of the Council of the Poor-law Medical Officers' Association of England and Wales,

Sheweth,—That whereas by the 18th Clause of the Medical Charities Act (Ireland), dispensary medical officers are required, without fee or reward, to examine and certify, under the statute in that behalf, as to the case of any dangerous lunatic brought before a justice of the peace within their respective districts, and whereas the performance of such duties, which necessitate great discrimination and judgment, is often accompanied by much loss of time and expense in travelling to and from the justice's residence, your petitioners hold that to impose on those officers such onerous obligations without any additional pecuniary consideration beyond their salaries must be felt to be a grievous injustice. Your petitioners, therefore, pray your honourable House that, having regard to the great services these gentlemen have rendered the community by the zealous manner in which they have performed their duties, as shown by the marked diminution in sickness and mortality, and by the considerable curtailment of Poor-law expenditure during the last nineteen years in Ireland, you will take their case into your consideration, and grant such reasonable payment for this duty as shall be a compensation for their outlay of time and money.

And your petitioners will ever pray.

Signed on behalf of the Council,

JOS. ROGERS, President.

MEDICAL ADVERTISING "CARDS."

Dr. Schoales.—We quite concur with our correspondent as to the effect of such cards as he has forwarded in lowering the position of a professional man. All that can be said is, that if any medical man is content to advertise that he makes "visits," "extracts teeth" at 1s., and supplies "medicines, according to the size of the bottles, from 1s. to 2s. 6d.," and charges 1s. 6d. for his "advice," he has fixed these low sums in consequence of the small estimate that he has himself formed of the value of his advice and medicine.

Metis had better consult some physician.

ACTION OF CHLORAL ON THE BLOOD.

To the Editor of THE LANCET.

SIR,—About four months since I attended a gentleman, aged forty-nine, suffering from ulceration of the mucous membrane of the bronchial tubes and bladder, and finally of the intestines also. At the request of a brother-surgeon, I consented to the administration of fifteen grains of chloral, followed by opium pills if necessary. The draught was given about 7 P.M. The following morning, at about 8 A.M., I received a message to visit my patient immediately. I found him slipping off his pillows, his eyelids half separated, his face very pallid, and his pulse very feeble. He was drowsy, yet rousable. He muttered, as distinctly as his dry mouth would permit of his so doing, "Pay Mrs. —— (mentioning the name of his landlady), get water-cart, do nothing, give me drink all day." He regained some degree of consciousness after this, but died suddenly whilst on the night-stool about two hours afterwards. I consider that he ought to have lasted about two days. He was excessively intolerant of all narcotics and sedatives; had, in his own opinion, twice narrowly escaped death from the inhalation of chloroform for the relief of odontalgia, and shuddered at the sound of any word beginning with "chlo."

Yours, &c.,

March, 1871. G.

R. H. P.—No announcement has yet been made. The naval medical service did not obtain the required number of candidates at the last competitive examination. There was no examination for the Indian service, and we understand that the British medical service has at present its full complement of officers.

Mr. Tarran's paper shall be inserted.

D. K. T.—We know nothing of the individual referred to by our correspondent.

THE ENTRANCE OF PUS INTO VEINS.

To the Editor of THE LANCET.

SIR,—May I ask space for one word to disclaim the opinion attributed to me by implication that the entrance of *pus* into the veins was the cause of pyæmia in either of the cases narrated by me at the Pathological Society on Jan. 17th. I do not think the word "pus" was used by myself, although I certainly believe the disease to have been produced in one case by a scrofulous "abscess" opening into a vein; but by such an abscess I understand a mass of degenerated material, which is certainly not pus, though it may have been so some years previously. In the other case the softening of a clot in the longitudinal sinus seemed the only possible source of infection; but neither here was there any true pus. The blame of another erratum, doubtless, rests upon myself; for though I meant to speak of the experiments of *Weber* on Pyæmia, I dare say your reporter correctly represented me as having said *Wagner*. The experiments of Weber are described in the "Archiv für Klin. Chirurgie," v., p. 270.

Yours truly,

Green-street, February 15th, 1871. J. F. PAYNE.

MURDER AND ITS PUNISHMENT.

IN continuation of our last week's reference to this subject, we note the appearance of a second Parliamentary Return, which shows that during the ten years 1860-69 the total number of murders reported by the police was 1247, while 2495 verdicts of murder were returned by coroners' juries in the same period. This difference is accounted for by the fact that cases of infanticide in which verdicts of murder are returned so often result, when the offenders are brought to trial, in convictions for concealment of birth only, the police records being in accordance with the result of the trials, and not of the inquests. The trials for murder in the ten years numbered 686, of which 345 resulted in acquittal, 99 in detention on the ground of insanity, and 243 in conviction. As we saw last week, only 50 per cent. of the convictions eventuated in the capital sentence.

Mr. G. Weller, (Wanstead.)—The Offices are at 9, Union-court, Old Broad-street, E.C.

SMALL-POX AND REVACCINATION.

To the Editor of THE LANCET.

SIR,—Amongst a number of revaccinations I have found that persons who had been vaccinated in Ireland were less prone to "take" than those who had been vaccinated in England. Failure has been more frequent in Irish than in English persons.

The system of medical relief in Ireland is on a better footing than our Poor-law system in England, and it is possible that more careful vaccinat on prevails in Ireland. In the very interesting account by Dr. Grieve of the 800 cases of small-pox, which appeared in THE LANCET of March 18th, no mention is made of the nationality of the patients. There are large numbers of Irish inhabitants in many of the small-pox stricken districts of London. It would be very interesting to know whether they have resisted the disease better than their English neighbours. Your obedient servant,

March 27th, 1871. WALTER FERGUS.

Mr. T. Worth.—As our remarks had no reference, so far as we are aware, to anything our correspondent has said, there is no need to insert his communication.

Observer.—Yes. It is an unprofessional proceeding. The proper channel for such announcements is a medical journal.

EXPULSION OF THE PLACENTA IN PREMATURE LABOUR.

To the Editor of THE LANCET.

SIR,—In your journal of Nov. 12th, 1870, I notice the report of a case of "Induction of Premature Labour," recorded by Chas. Roberts, M.R.C.S., in which the placenta seems to have given much trouble, being finally extracted after the lapse of ten days. I think if Mr. Roberts had introduced *one finger* into the uterus, carefully and thoroughly detached the placenta with it, and then left the case to nature, he would have had the pleasure of seeing the placenta expelled within twelve hours after. This has been my invariable practice for the last six years, and I have never yet seen it fail. I sometimes give a few doses of ergot after the operation.

I am, Sir, yours truly,

JOHN BAIRD, M.R.C.S.E.

Mount Gambier, South Australia, Jan. 17th, 1871.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Rutherford; Dr. W. Gull; Captain Wade; Mr. Jeanes; Mr. Vialls, Poplar; Mr. Greig; Mr. Sargeant; Dr. Tibbits; Mr. Wright, Castle Douglas; Dr. Edwards, Cardiff; Mr. Duncan; Mr. Weller; Dr. H. J. Jones; Mr. C. J. Green, Huntingdon; Dr. Young, Salisbury; Mr. Daniel; Dr. Oliver; Mr. H. Cooper, Wootton Bassett; Dr. Buckley, Manchester; Mr. Reeves; Dr. Johnston, Dublin; Dr. Fergus, Marlborough; Dr. Schooles, Hythe; Mr. Stedman; Mr. Gray, Rugeley; Dr. Martin; Dr. Edwards Crisp; Dr. C. T. Williams; Dr. Logan, Penpont; Mr. Phillips; Mr. Barton; Mr. Crossby; Mr. Kirby; Mr. W. Jones; Mr. Harris; Dr. Balbirnie; Mr. Heale; Mr. Griffith, Ravenglass; Mr. White; Dr. Whittell, Adelaide; Mr. Eyre, Chelmsford; Mr. J. Baird, Mount Gambier; Mr. J. Appleyard, Longford, Tasmania; Dr. Carey, Guernsey; Mr. Coleman; Mr. Buxton; Messrs. Wells and Co., San Francisco; Mr. Whitehead; Mr. Seaman; Mr. W. Hall; Mr. Evans; Mr. Frost, New York; Mr. J. C. Johnson; Mr. R. Wilson, Sydenham; Dr. Wyllys, Great Yarmouth; Mr. Williams, Ware; Mr. Bennett, Frome; Mr. Marriott, Leamington; Dr. Harding, Whittlesea; Mr. T. James, Darlington; Dr. Moore; Mr. Wilton, Salisbury; Mr. White, Exmouth; Mr. Friend, Cheltenham; Mr. Abbott, Northampton; Mr. Hay, Llanelly; Mr. Coates, Lyme Regis; Mr. Jackson, Ripon; Mr. Gordon, Penrith; Dr. Wilson, Northampton; Mr. Grant; Mr. Roland, Bath; Mr. Edmonds; Mr. Simmons, Stourbridge; Mr. A. R. Verity, Garndiffaith; Mr. Roberts; Dr. Davies, Abersychan; Mr. E. Hall; Mrs. Allen, Bankipore; Mr. Worth; Mr. Parks; Dr. Wilson, Ailoa; Mr. W. Arminson, Dublin; Dr. Dunlop, Glasgow; Rev. H. Crawley, Weedon; Mr. Butler; Mr. Brook; Mr. Cater; Mr. E. Young; Mr. Day; Messrs. Lippincott and Co., Philadelphia; Mr. Ford; Mr. Douglas; Mr. Wise; Mr. Mitchinson; Mr. Teale, Leeds; Mr. Crook; Mr. Colthurst, Taunton; Mr. Rennie; Mr. Cooper, Bowden; Dr. Hutchinson, Minneapolis; Mr. Hancock, Luton; Mr. Smith, Guildford; Mr. Edwards, Tunstall; Mr. Overton, Stafford; Mr. Davies, Abergavenny; Veritas; A Twenty Years' Subscriber; Another M.D.; H. B.; The Secretary of the Massachusetts Board of Health; Caledonia; A. B.; Medicus; A. B. C.; R. H. P.; X.; The Silicated Carbon Filter Company; An Assistant-Surgeon; A Subscriber of Twenty-nine Years' Standing; Studens; A. Y.; &c. &c.

Hertfordshire Express, Alloa Journal, Cork Examiner, Waterford Chronicle, La Nuova Liguria Medica Giornale di Scienze Mediache, Salisbury Times, Halstead Gazette, Medical Temperance Journal, Newcastle Telegraph, Melbourne Herald, North British Daily Mail, Philadelphia Medical Times, City Press, Glasgow Herald, and *Brighton Guardian* have been received.

Medical Diary of the Week.

Monday, April 3.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ANTHROPOLOGICAL INSTITUTE.—8 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. Dr. Brunton, "On a Case of Measles with Variola, Measles with Eczema, Scarlatina with Variola, and Scarlatina with Varicella. — Dr. Meymott Tidy, "On a New Process for the Detection of Sugar in Diabetic Urine."

Tuesday, April 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. The following amongst other Specimens will be exhibited:—Mr. F. Churchill: Pedunculated Growths from the Skin; Effects of Ether Spray upon the Skin in Addison's Disease. Dr. Whipham: Growth in Liver. Mr. Hulke: Large Medullary Tumour of Belly, with similar Tumour of Orbit.

Wednesday, April 5.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
OBSTETRICAL SOCIETY OF LONDON.—7 P.M. Council Meeting.—8 P.M. Dr. Grailly Hewitt: "The Vomiting of Pregnancy, its Cause and Treatment." Dr. Wiltshire, "On Tetanus after Abortion."—And other papers.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. W. K. Parker, "On the Mode of Working out the Morphology of the Skull."—Mr. C. Cubitt, "On Linear Projection considered in its Application to the Delineation of Objects under Microscopic Observation."

Thursday, April 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 12; other Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 3 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
HARVEIAN SOCIETY OF LONDON.—8 P.M. 7½ P.M. Council Meeting.—8. P.M. Discussion on "Variola and Vaccination."

Friday, April 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, April 8.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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